

FINAL REMEDIAL ACTION CONSTRUCTION DRAWINGS

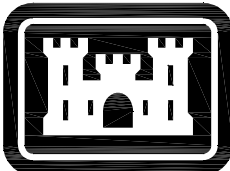
THE ELLIS PROPERTY SUPERFUND SITE

150 SHARP ROAD

EVESHAM TOWNSHIP

BURLINGTON COUNTY, NEW JERSEY

PREPARED FOR:



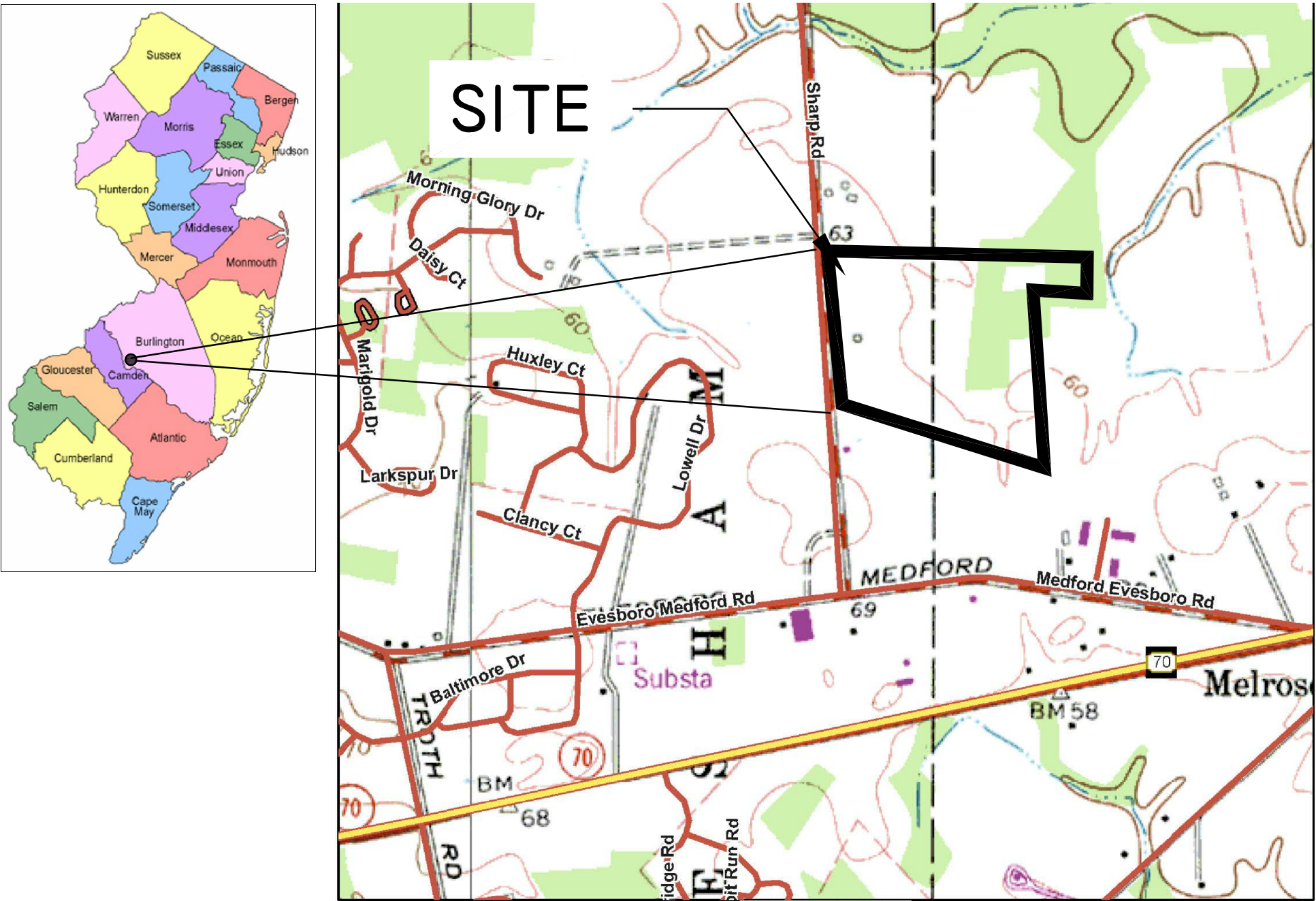
US Army Corps  
of Engineers®  
Kansas City District

PREPARED BY:

HDR OBG a joint venture

FEBRUARY 2020

CONSTRUCTION DRAWING  
INDEX



LOCATION MAP  
SCALE: 1" = 1000'

SHEET	TITLE
G-00	COVER SHEET
G-01	GENERAL NOTES
V-01	EXISTING CONDITIONS PLAN
C-01	REMEDIAL ACTION SITE PLAN
C-02	UTILITY RELOCATION PLAN
C-03	CONSTRUCTION STAGING PLAN
C-04	IN SITU THERMAL TREATMENT AREAS
C-05	ISTT AREA CROSS SECTION A-A'
C-06	ISTT AREA CROSS SECTION B-B'
C-07	ISTT AREA CONFIRMATORY SAMPLING PLAN
C-08	SITE RESTORATION GRADING PLAN
C-09	SITE RESTORATION RE-VEGETATION PLAN
D-01	CONSTRUCTION DETAILS
D-02	AS-BUILT DETAILS
D-03	EROSION CONTROL DETAILS



GENERAL NOTES:

- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS BEFORE BEGINNING WORK.
- SITE IS LOCATED AT 150 SHARP ROAD IN EVESHAM TOWNSHIP, BURLINGTON COUNTY, NEW JERSEY.
- ACCESS TO THE SITE WAS OBTAINED THROUGH A CONSENT ORDER ISSUED IN 1996.
- ALL SITE FEATURES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES NOTED SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE A GEOPHYSICAL SURVEY COMPLETED TO LOCATE ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES WHETHER SHOWN ON THIS PLAN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE SURVEY SHALL INCLUDE THE LOCATION OF THE SHEET PILE WALL INSTALLED AS A PART OF THE EXCAVATION PORTION OF THE REMEDY.
- IN THE EVENT THE CONTRACTOR DAMAGES ANY EXISTING UTILITY SERVICE CAUSING SERVICE INTERRUPTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER.
- PROVISIONS SHALL BE TAKEN TO MINIMIZE NOISE. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED BETWEEN THE HOURS OF 5PM TO 7AM.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING UNAUTHORIZED PERSONS DO NOT ENTER THE EXCLUSION ZONE. SNOW FENCE OR OTHER ACCEPTABLE MEANS SHALL BE PROVIDED AROUND THE HAZARDOUS WORK ZONE TO RESTRICT ACCESS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE SITE. ANY REPAIRS RESULTING FROM DAMAGE CAUSED BY TRESPASSERS SHALL BE AT THE EXPENSE OF THE CONTRACTOR. MINIMUM SECURITY MEASURES SHALL BE AS REQUIRED BY THE CONTRACT SPECIFICATIONS.
- ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITIONS TO THE SATISFACTION OF THE CONTRACTING OFFICER.

SURVEY NOTES:

- SURVEY BY MERESTONE CONSULTING INC. DATED NOVEMBER 12, 2014.
- HORIZONTAL DATUM = NJSPCS – NAD83(NA2011) EPOCH 2010.0000.
- VERTICAL DATUM = NAVD 1988 (GEOID 2012A).
- LOCATION OF THE SHEET PILE WALL ALONG THE NORTH PORTION OF THE SITE IS BASED ON SHEET 3 OF 7 OF THE PLAN SET ENTITLED ELLIS PROPERTY SUPERFUND SITE, GROUND WATER BARRIER WALL, DATED APRIL 22, 2011, PREPARED BY THE LOUIS BERGER GROUP, INC.

WASTE DISPOSAL NOTES:

- THE CONTRACTOR MUST TAKE EVERY EFFORT TO REDUCE THE AMOUNT OF WASTE THAT IS GENERATED, TO REUSE MATERIALS WITH THE CONCURRENCE OF THE CONTRACTING OFFICER, AND TO SEGREGATE WASTE MATERIALS FOR WASTE DISPOSAL.
- ALL WASTE MATERIALS MUST BE PROPERLY TRANSPORTED, STORED, HANDLED, AND CONTAINED TO PREVENT SPILLS, LEAKAGE, DISCHARGE OR RELEASE TO THE ENVIRONMENT. WASTE CONTAINERS MUST BE PROPERLY LABELED TO IDENTIFY CONTENTS.
- CONTRACTOR MUST NOT DISCHARGE OR DISPOSE OF ANY WASTE INTO ANY WATER BODY.
- CONTRACTOR MUST DISPOSE OF ALL WASTE MATERIALS ACCORDING TO ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- THE REGIONAL OFF–SITE COORDINATOR FOR EPA REGION 2 SHALL APPROVE THE WASTE DISPOSAL FACILITY SELECTED BY THE CONTRACTOR. ALL WASTE MANIFESTS REQUIRED FOR THE PROJECT SHALL BE PREPARED AND SIGNED BY THE CONTRACTING OFFICER.

LAND GRADING NOTES:

- PROVISIONS SHALL BE MADE TO DIVERT SURFACE RUNOFF AWAY FROM EXPOSED AREAS. RUNOFF THAT COMES IN CONTACT WITH IMPACTED SOILS SHALL BE COLLECTED AND EITHER TREATED IN A TEMPORARY GROUNDWATER TREATMENT SYSTEM PROVIDED BY THE CONTRACTOR OR DISPOSED OFF–SITE TO AN APPROVED FACILITY.
- ALL GRADED OR DISTURBED AREAS, INCLUDING SLOPES, SHALL BE PROPERLY PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED, AND MAINTAINED IN ACCORDANCE WITH THE SEDIMENT CONTROL PLAN AND THE "NEW JERSEY EROSION CONTROL STANDARDS.
- AREAS THAT ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.

ISTT SYSTEM NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE POWER DROP FOR THE ISTT SYSTEM IN A REASONABLE TIME FRAME SO AS TO NOT UNNECESSARYLY DELAY THE PROJECT WORK.
- THE ISTT SYSTEM SHALL BE IN ACCORDANCE WITH ALL STATE, FEDERAL, AND LOCAL REGULATIONS. ALL PERMITS REQUIRED TO INSTALL AND OPERATE THE SYSTEM SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING INSTALLATION.

CONSTRUCTION SEQUENCE:

A PRELIMINARY SCHEDULE FOR THE ACTIVITIES NECESSARY TO COMPLETE THE REMEDIAL ACTION (RA) IS BELOW. THE ACTUAL SEQUENCE WILL BE DETERMINED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE WORK PLAN THAT WILL BE SUBMITTED PRIOR TO COMMENCING THE WORK.

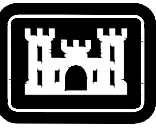
- OBTAIN/INSTALL POWER DROP.
- UNDERGROUND UTILITY LOCATION: ALL UNDERGROUND UTILITIES AND THE EXISTING GROUNDWATER BARRIER WALL SHALL BE LOCATED.
- MOBILIZATION: TRAILERS AND EQUIPMENT SHALL BE MOBILIZED TO THE SITE.
- SITE PREPARATION: INSTALL THE TEMPORARY CHAIN LINK FENCE, ALL EROSION CONTROL MEASURES, CONSTRUCT THE STABILIZED CONSTRUCTION ENTRANCE.
- SITE PREPARATION: INSTALL EROSION AND SEDIMENT CONTROLS AND CLEAR AREA DESIGNATED FOR ISTT. INSTALL TEMPORARY FACILITIES INCLUDING PERIMETER FENCING (IF REQUIRED).
- INSTALL/OPERATE ISTT SYSTEM: MOBILIZE ISTT EQUIPMENT TO THE SITE AND CONSTRUCT SYSTEM. PROVIDE STARTUP AND TROUBLE SHOOTING AND THEN BEGIN OPERATION. THE SYSTEM WILL BE OPERATED UNTIL THE CLEAN UP GOALS ARE MET.
- DEMOBILIZE ISTT SYSTEM: UPON ACHIEVING THE CLEANUP GOALS FOR THE SITE THE ISTT SYSTEM WILL BE DEMOBILIZED. ALL PIPING AND EQUIPMENT WILL BE REMOVED FROM THE SITE. WELLS SHALL BE ABANDONED IN PLACE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- RESTORATION: RESTORE THE ISTT AREA. REMOVE AND DISPOSE OF COVER SYSTEM. REGRADE AREA AS NEEDED TO RESTORE TO EXISTING ELEVATIONS AND PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING. PLACE FOUR INCHES OF TOPSOIL AND SEED WITH PERMANENT SEED AND MULCH. INSTALL FIVE PAIRS OF MONITORING WELLS SIX MONTHS AFTER ISTT SYSTEM SHUTDOWN TO ALLOW THE AREA TO COOL BEFORE INSTALLATION. RESTORE ALL EXISTING INFRASTRUCTER DAMAGED DURING ISTT.

MAINTENANCE AND PROTECTION OF TRAFFIC:

- ALL TRAFFIC CONTROL DEVICES USED FOR MAINTENANCE AND PROTECTION OF TRAFFIC SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS AS SET FORTH IN THE NATIONAL MUTCD LATEST EDITION.
- THE CONTRACTOR SHALL NOT PARK EQUIPMENT OR STORE MATERIAL OVERNIGHT WHERE IT IS DEEMED BY THE CONTRACTING OFFICER TO BE A HAZARD TO TRAFFIC.
- THE CONTRACTOR SHALL NOT ALLOW CONSTRUCTION RELATED VEHICLES OR ACTIVITIES TO IMPEDE OR ADVERSELY AFFECT THE FLOW OF TRAFFIC ON THE SHARP ROAD. THE CONTRACTOR SHALL NOT ALLOW CONSTRUCTION RELATED VEHICLES TO QUEUE ALONG SHARP ROAD WITHOUT PRIOR APPROVAL FROM THE CONTRACTING OFFICER.
- DURING THE PROGRESS OF CONSTRUCTION, TRUCKS ENTERING OR LEAVING THE SITE SHALL USE ONLY ROADS THAT PERMIT TRUCK TRAVEL AS GOVERNED BY ANY AGENCY HAVING JURISDICTION. ALL ROADWAYS AFFECTED BY CONSTRUCTION OF THIS PROJECT SHALL BE RESTORED TO PRECONSTRUCTION CONDITIONS.
- FLAGMEN PROVIDED BY THE CONTRACTOR SHALL BE ON SITE WHENEVER TRUCKS ENTER OR EXIT THE SITE TO ALLOW THE SAFE ENTERING AND EXITING OF SINGLE VEHICLES ONTO SHARP ROAD AND TO MINIMIZE QUEUING ON SHARP ROAD.

ENVIRONMENTAL NOTES:

- THE CONTRACTOR SHALL REDUCE VEHICLE IDLING. ALL VEHICLES, BOTH ON AND OFF ROAD (INCLUDING CONSTRUCTION EQUIPMENT) SHALL BE SHUT OFF WHEN NOT IN USE FOR MORE THAN 5 MINUTES.
- CONTRACTORS MUST NOT SPILL, DISCHARGE, OR RELEASE ANY HAZARDOUS MATERIAL OR CHEMICAL UPON OR FROM THE SITE. A RELEASE IS DEFINED AS ANY UNPLANNED RELEASE, LEAKING, PUMPING, POURING, EMITTING, DUMPING, DISCHARGING, EMPTYING, OR DISPOSING OF A HAZARDOUS MATERIAL OR CHEMICAL (INCLUDING WASTEWATER OR CHEMICALLY TREATED WATER) FROM A PRIMARY CONTAINMENT.
- CONTRACTOR EQUIPMENT MUST BE PROPERLY MAINTAINED AND IS SUBJECT TO INSPECTION BY THE CONTRACTING OFFICER. IF EQUIPMENT IS FOUND LEAKING, IT MUST IMMEDIATELY BE CONTAINED, STOPPED, AND REPAIRED.
- UNREPORTED SPILLS, DISCHARGES, AND RELEASES ARE A VIOLATION OF FEDERAL, STATE, AND LOCAL LAWS. IF A CHEMICAL OR UNKNOWN LIQUID IS SPILLED, DISCHARGED, OR RELEASED TO THE PROPERTY, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE CONTRACTING OFFICER.
- WHEN A SPILL, DISCHARGE, OR RELEASE IS DIRECTLY ATTRIBUTABLE TO A CONTRACTOR, THEIR SUBCONTRACTOR OR SUPPLIER, THE CONTRACTOR MUST PROVIDE ANY ASSISTANCE REQUIRED TO IDENTIFY THE CAUSE OF THE RELEASE AND TO CLEAN UP THE RELEASE. HOWEVER CONTRACTORS MUST NOT BEGIN CLEAN UP UNTIL AUTHORIZED TO DO SO BY THE CONTRACTING OFFICER.
- ANY CHEMICAL SPILL, DISCHARGE, OR RELEASE CAUSED BY THE CONTRACTOR MUST BE CLEANED TO THE THE CONTRACTING OFFICER'S SATISFACTION.



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7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/09/19							
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19							
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	02/17/19							
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/19/18							
3	FINAL RA CONSTRUCTION DRAWINGS	08/27/18							
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/18							
1	INTERMEDIATE DESIGN	02/07/18							
Symbol	Description	Date							Appr.

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

10/22/2019

Date:

TC

Designed by:

SK

Drawn by:

SK

Checked by:

TC

Submitted by:

CADD File Name:

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

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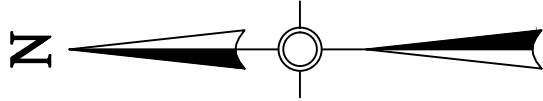
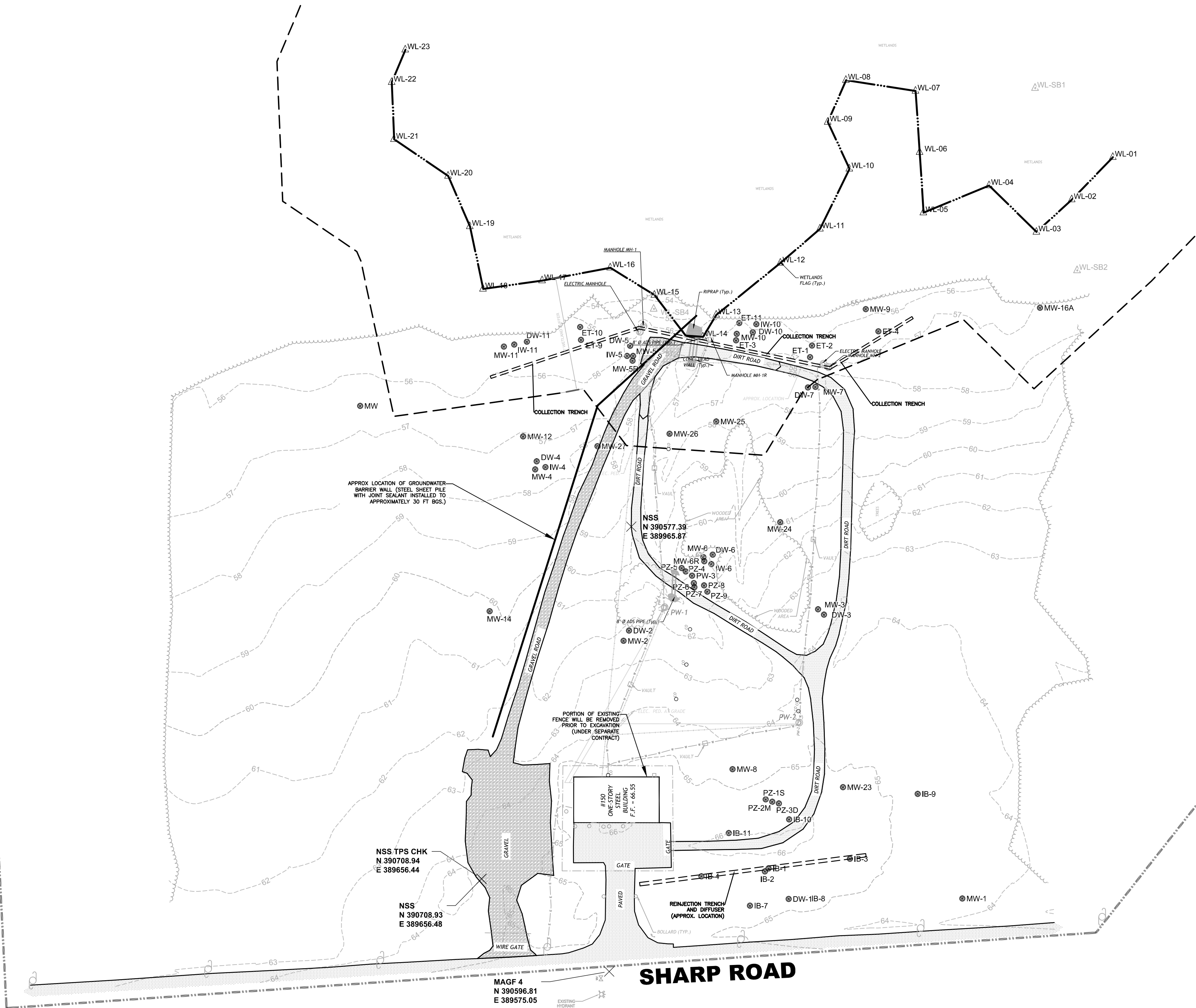
ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

GENERAL NOTES

Sheet  
Reference  
Number:

G-01

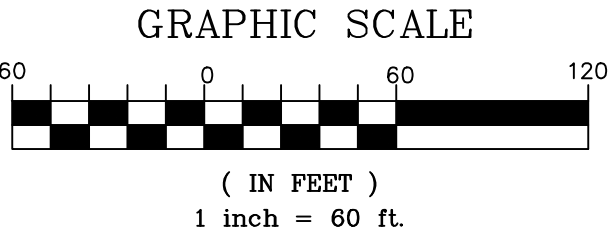




- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY
  - WETLAND LIMIT
  - CONTOUR MAJOR
  - CONTOUR MINOR
  - BUILDING OUTLINE
  - MONITORING WELL LOCATION
  - GRAVEL ROAD
  - DIRT ROAD
  - PAVED ROAD
  - MANHOLE
  - WETLAND FLAG
  - WETLAND SOIL BORING
  - TREE LINE
  - 100-FT WETLAND BUFFER
  - UNDERGROUND WATER PIPE
  - UNDERGROUND CONTROL CABLE (APPROX. LOCATION)
  - UNDERGROUND ELECTRIC LINE (APPROX. LOCATION)
  - ELECTRIC POLE
  - CHAIN LINK FENCE
  - 1" DIA. PVC CLEANOUT
  - SURVEY CONTROL POINT (NORTHING AND EASTING)

- NOTES:**
- FOR GENERAL NOTES REFER TO SHEET G-01.
  - THE EXISTING CHAIN LINK FENCE AROUND THE SITE BUILDING MUST BE REMOVED AS A PART OF EXCAVATION.

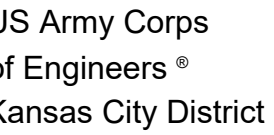
- SURVEY NOTES:**
- SURVEY BY MERESTONE CONSULTING INC. DATED NOVEMBER 12, 2014.
  - HORIZONTAL DATUM = NJSPCS - NAD83(NA2011) EPOCH 2010.0000.
  - VERTICAL DATUM = NAVD 1988 (GEOID 2012A).
  - LOCATION OF THE SHEET PILE WALL IS BASED ON SHEET 3 OF 7 OF THE PLAN SET ENTITLED ELLIS PROPERTY SUPERFUND SITE, GROUND WATER BARRIER WALL, DATED APRIL 22, 2011, PREPARED BY THE LOUIS BERGER GROUP, INC.
  - APPROXIMATE PROPERTY BOUNDARY WAS OBTAINED FROM 100% DESIGN DRAWINGS PREPARED BY ACRES INTERNATIONAL CORPORATION DATED 09/10/1998.



Symbol	Description	Date	Appr.
7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/09/19	
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/17/19	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/10/19	
3	FINAL RA CONSTRUCTION DRAWINGS	08/27/19	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/19	
1	INTERMEDIATE DESIGN	06/27/19	

Designed by:	Date:	10/22/2019
TC		
Drawn by:	Drawing code:	
SK		
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TC		
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Symbol	Description	Date	Appr.
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2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/15	
3	DRAFT FINAL RA CONSTRUCTION DRAWINGS	08/27/15	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/10/15	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/17/15	
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/15	
7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/09/15	

<b>U.S. ARMY CORPS OF ENGINEERS KANSAS CITY DISTRICT KANSAS CITY, MISSOURI</b>	Designed by:	TC	Date:	10/22/2019
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OBG

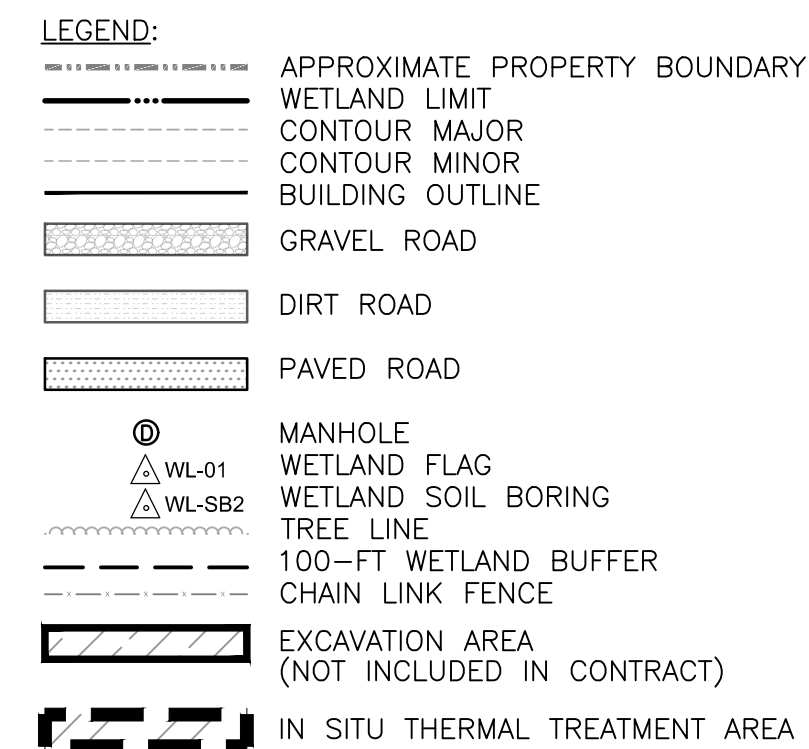
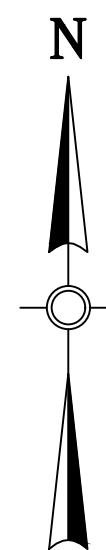
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ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

REMEDIAL ACTION  
SITE PLAN

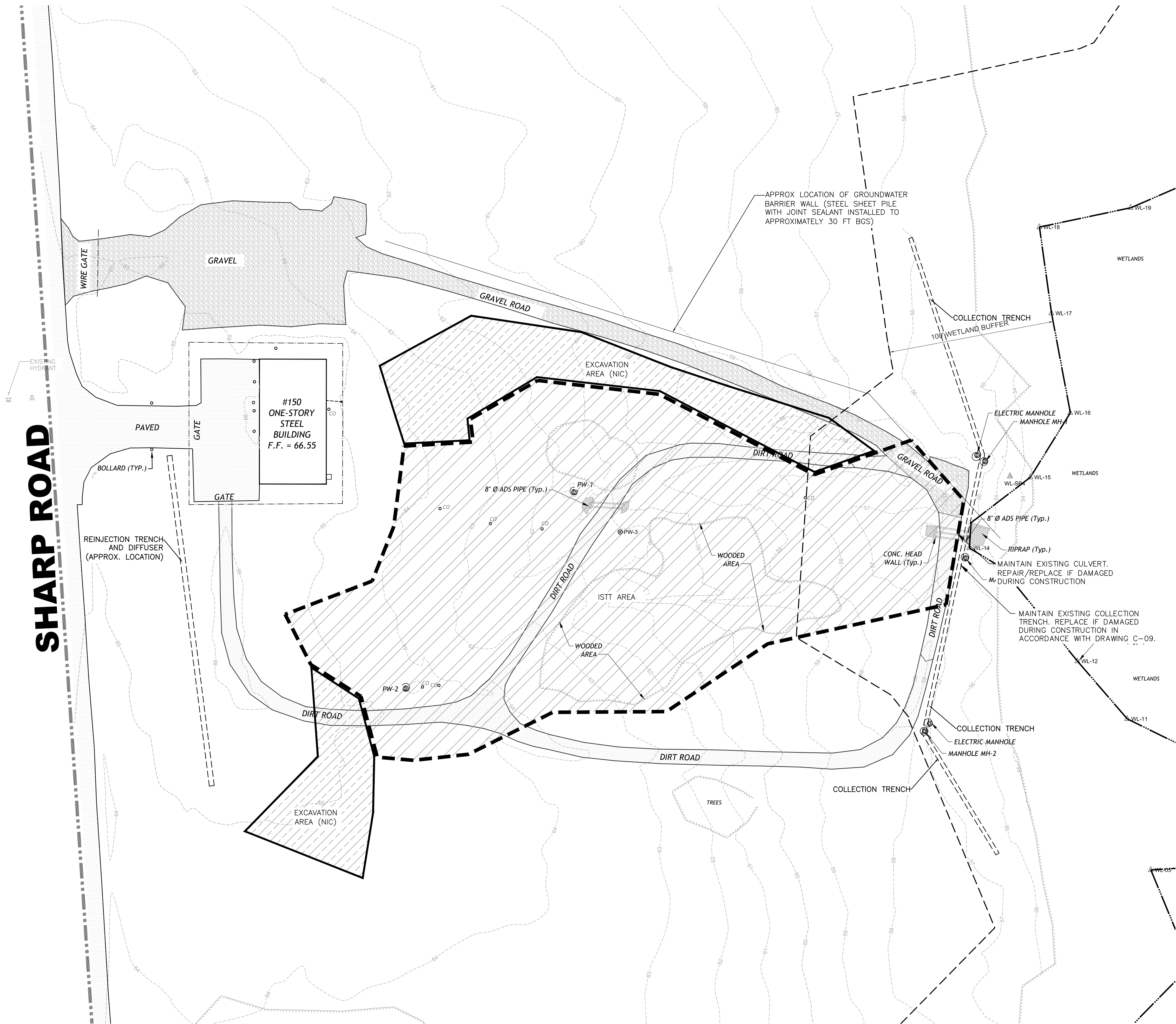
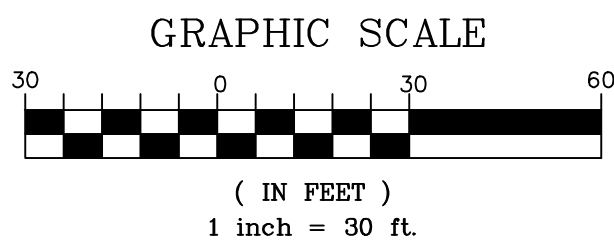
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Number:

C-01



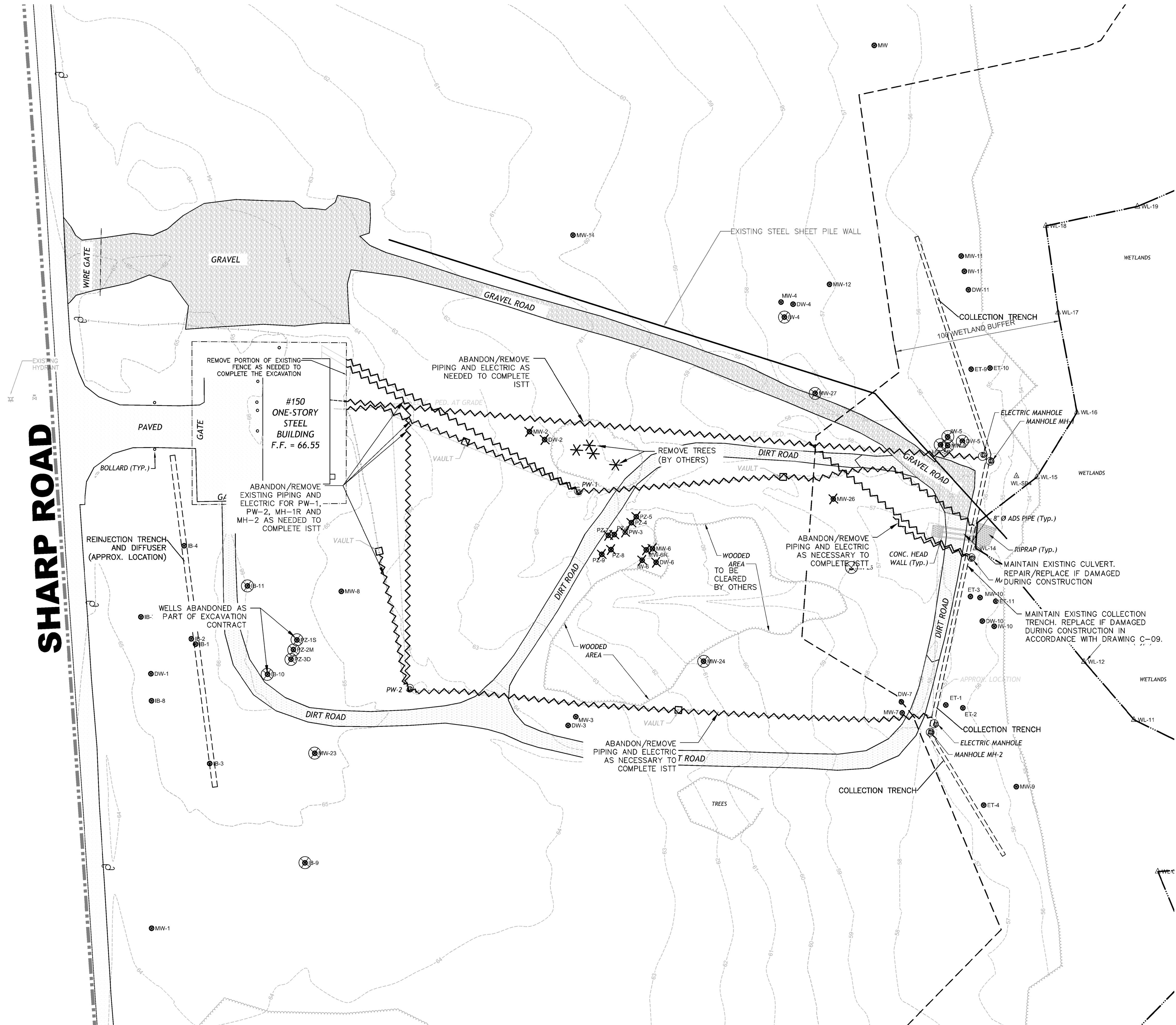
NOTES:

1. FOR GENERAL NOTES REFER TO SHEET G-01.
2. EXCAVATION WORK IS IN PROGRESS AND MAY NOT BE FULLY COMPLETE PRIOR TO MOBILIZATION OF EQUIPMENT UNDER THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE EXCAVATION CONTRACTOR AS NEEDED TO KEEP WORK UNDER THE ISTT CONTRACT ON SCHEDULE.





SHARP ROAD

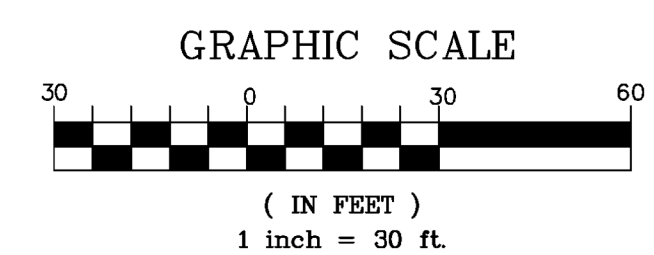


**LEGEND:**

---	APPROXIMATE PROPERTY BOUNDARY
---	WETLAND LIMIT
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	BUILDING OUTLINE
●	MONITORING WELL LOCATION
---	GRAVEL ROAD
---	DIRT ROAD
---	PAVED ROAD
⊕	MANHOLE
⊕	WETLAND FLAG
⊕	WETLAND SOIL BORING
---	TREE LINE
---	100-FT WETLAND BUFFER
---	UNDERGROUND WATER PIPE
---	UNDERGROUND CONTROL CABLE (APPROX. LOCATION)
---	UNDERGROUND ELECTRIC LINE (APPROX. LOCATION)
---	ELECTRIC POLE
---	CHAIN LINK FENCE
---	APPROXIMATE FLOOD PLAIN BOUNDARY
---	1" DIA. PVC CLEANOUT
⊗	WELL ABANDONED AS PART OF EXCAVATION
✱	REMOVE TREES
✱	ABANDON WELL
✱	ABANDON PIPE
---	GROUNDWATER PIPE (PLASTIC)
---	GROUNDWATER PIPE (METAL)
---	ELECTRIC

**NOTES:**

- FOR GENERAL NOTES REFER TO SHEET G-01.
- ALL PIPING AND ASSOCIATED COMMUNICATION AND ELECTRIC FOR MH-1R, MH-2, PW-1, PW-2 AND THE TREATMENT PLANT WILL BE ABANDONED/REMOVED TO FACILITATE ISTT. ALL PIPING AND ELECTRIC SHALL BE REPLACED FOLLOWING COMPLETION OF THE ISTT ONCE THE AREA HAS COOLED.
- EXISTING INFRASTRUCTURE WITHIN AND ADJACENT TO THE ISTT SHALL BE PROTECTED. ANY DAMAGE SHALL BE REPAIRED OR REPLACED UPON COMPLETION OF THE ISTT.
- TREE CLEARING AND REMOVAL ARE NOT INCLUDED IN THIS CONTRACT AND WILL BE DONE BY OTHERS.



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2/2020	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/09/19	FINAL ISTT RA CONSTRUCTION DRAWINGS	10/22/19	FINAL ISTT RA CONSTRUCTION DRAWINGS	09/11/19	REVISED FINAL RA CONSTRUCTION DRAWINGS	08/27/19	FINAL RA CONSTRUCTION DRAWINGS	07/16/19	08/27/19	Date	Appr.
6	8	7	6	5	4	3	2	1	INTERMEDIATE DESIGN	Description	Symbol		

Date: 10/22/2019

Designed by: TC

Drawn by: SK

Checked by: TC

Submitted by: TC

Drawing code:

Plot scale:

CADD File Name:

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

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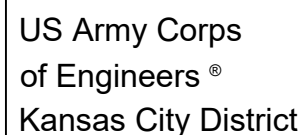
ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

UTILITY RELOCATION PLAN

Sheet  
Reference  
Number:

C-02





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7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/26/19
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	02/11/19
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/10/15
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2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/15
1	INTERMEDIATE DESIGN	05/27/15

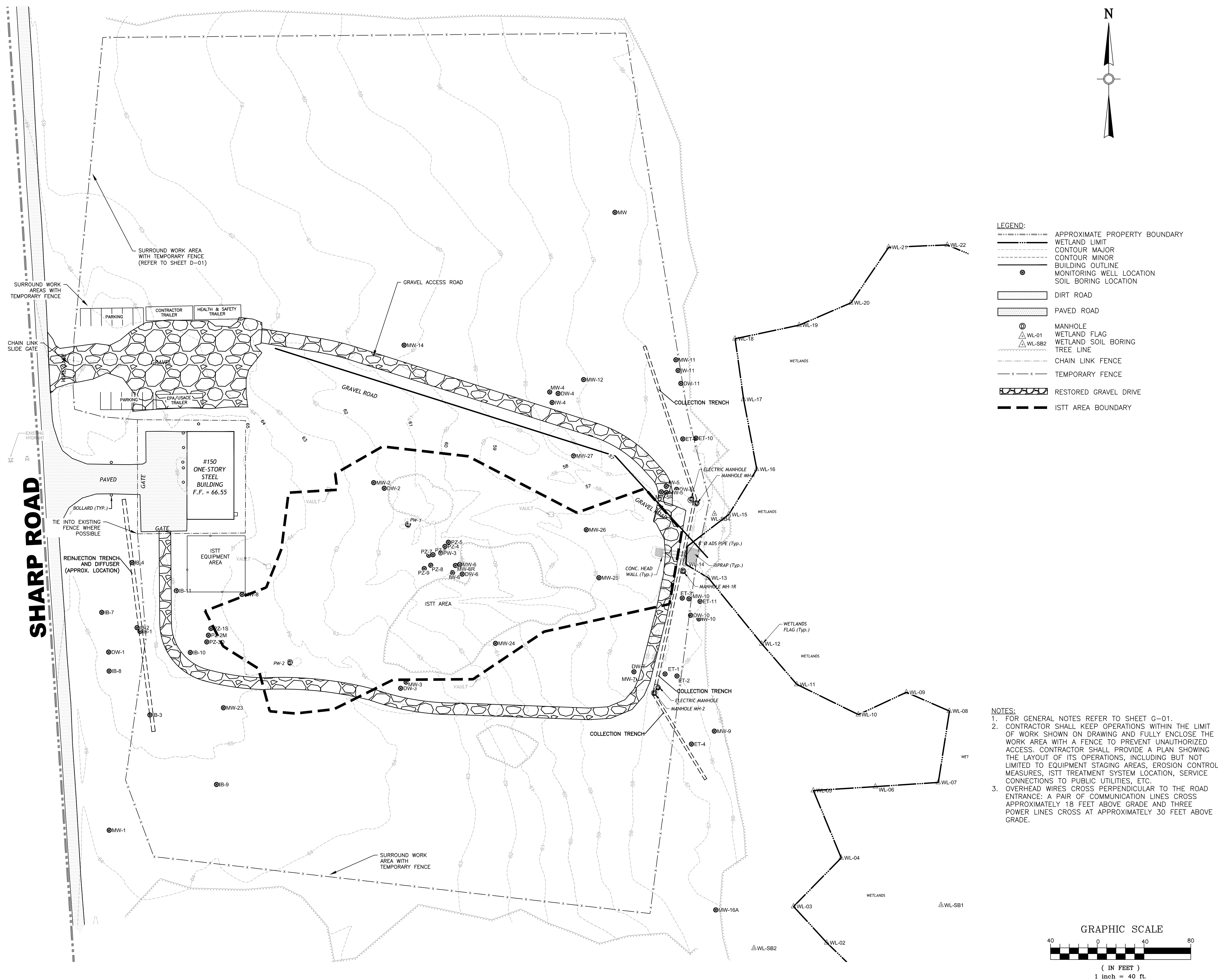
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HDR OBG a joint venture	Drawn by: SK	Drawing code:
	Checked by:	Plot scale:
	Submitted by: TC	CADD File Name:

ELLIS PROPERTY SUPERFUND SITE  
EVEESHAM TOWNSHIP, NEW JERSEY

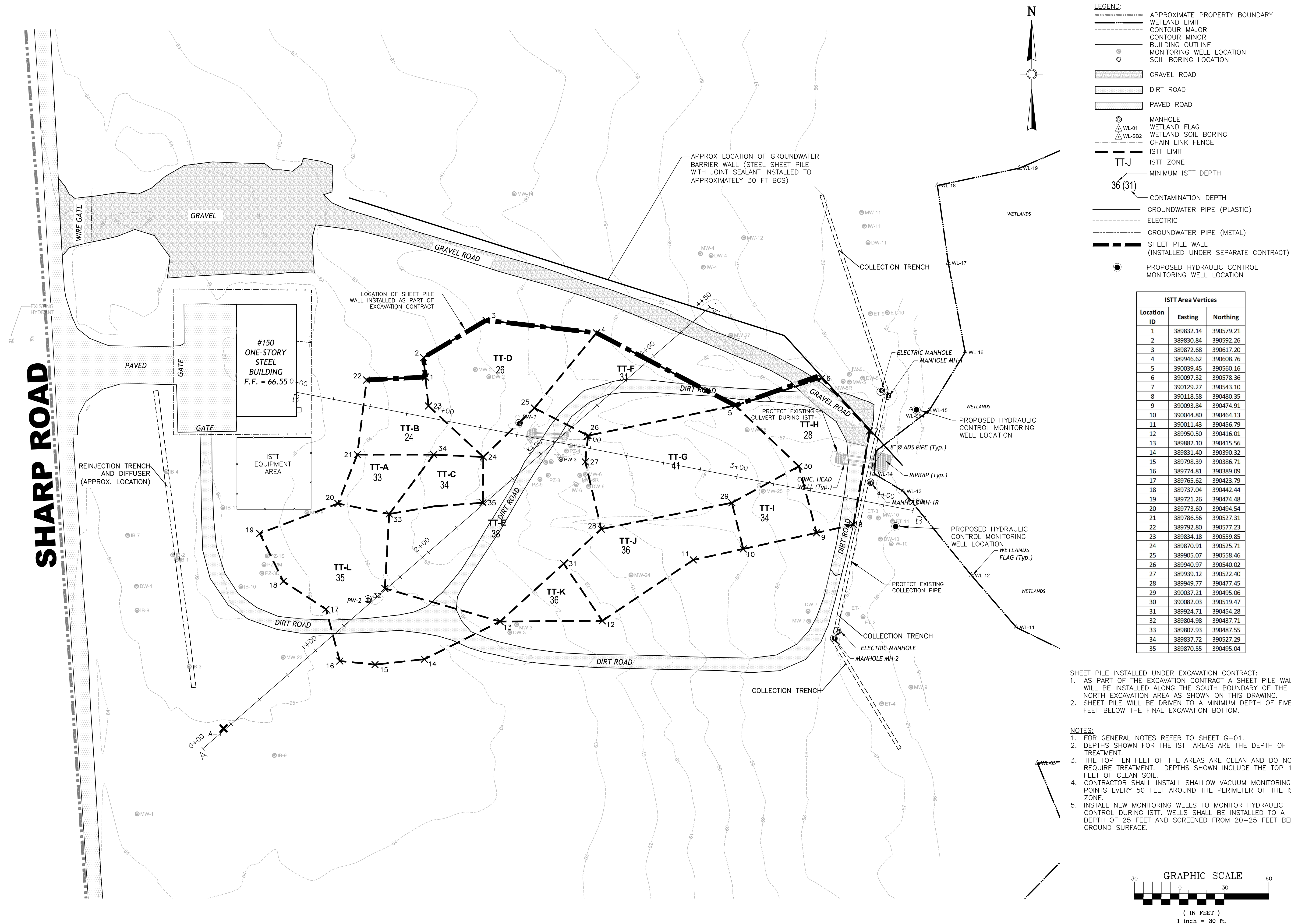
CONSTRUCTION  
STAGING PLAN

Sheet  
Reference  
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C-03







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3	FINAL RA CONSTRUCTION DRAWINGS	06/27/15	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/15	
1	INTERMEDIATE DESIGN	05/27/15	
	Symbol	Description	Date
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Designed by: TC	Date: 10/22/2019
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U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

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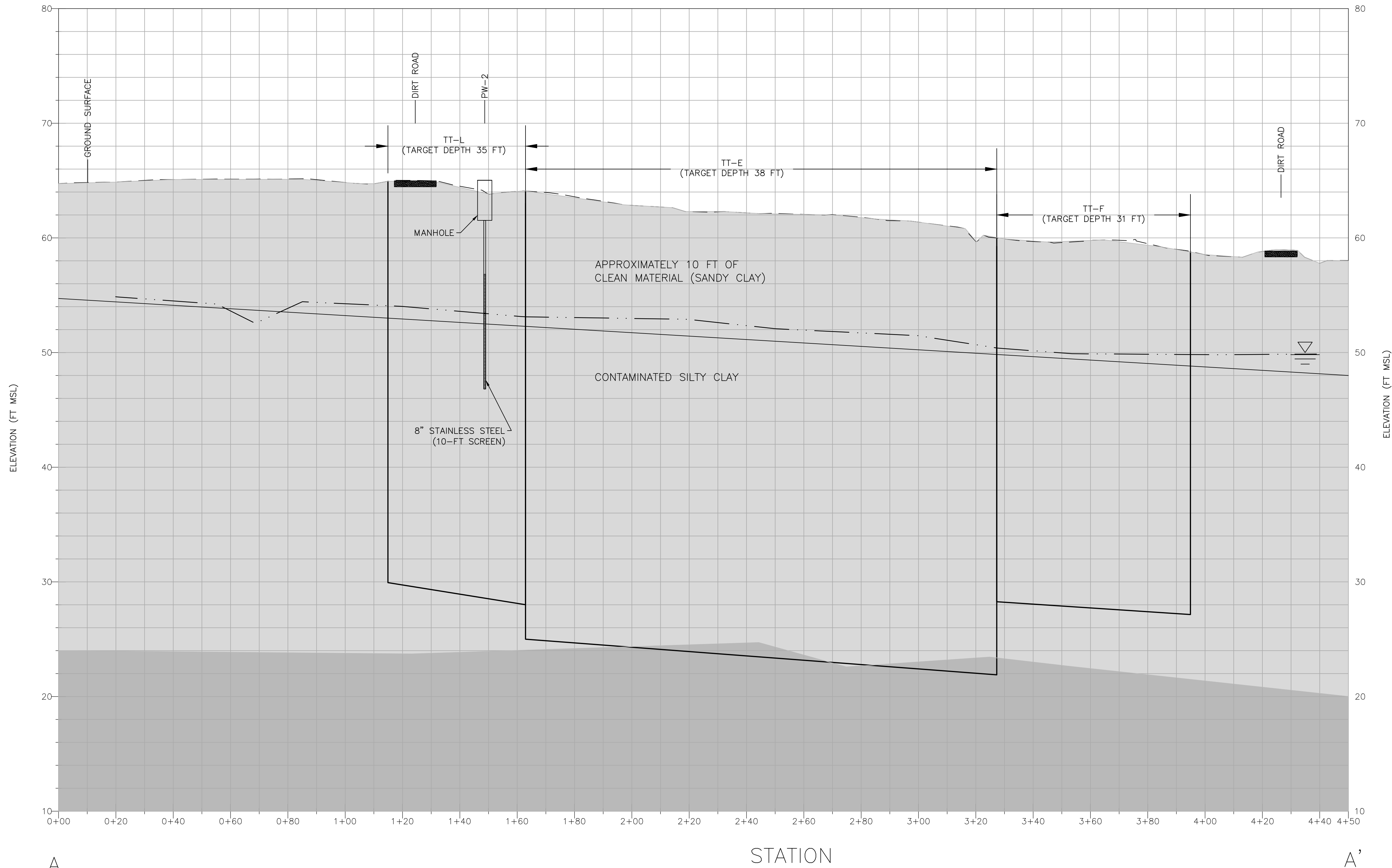
ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

# IN SITU THERMAL TREATMENT AREAS

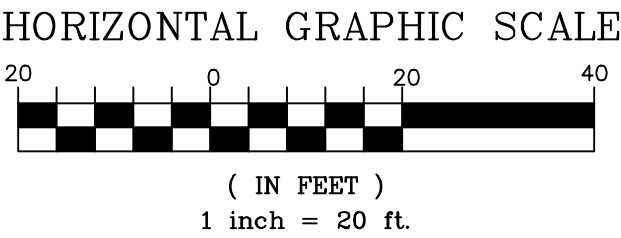
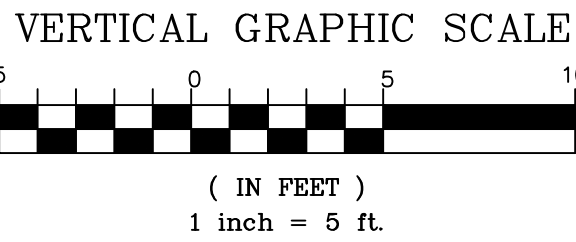
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C-04





LEGEND	
	CONTAMINATED ZONE BOUNDARY
	TARGET ISTT DEPTH
	APPROXIMATE WATER TABLE
	HORNERSTOWN FORMATION
	NAVESINK FORMATION



- NOTES:
- GROUNDWATER TABLE SHOWN IS BASED ON BORINGS COMPLETED DURING THE 2014 PDI.
  - PW-2 CONSTRUCTION DETAILS BASED ON DRAWINGS PREPARED BY ACRES INTERNATIONAL CORPORATION, DATED AUGUST 1999 AND PREPARED AS PART OF THE ELLIS PROPERTY GROUNDWATER REMEDIATION DESIGN DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED.



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Symbol	Description	Date	Appr.
7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/26/19	
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	02/17/19	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/10/15	
3	FINAL RA CONSTRUCTION DRAWINGS	08/27/15	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/15	
1	INTERMEDIATE DESIGN	05/27/15	

Designed by: IC	Date: 10/22/2019
Drawn by: SK	Drawing code:
Checked by:	Plot scale:
Submitted by: IC	CADD File Name:

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

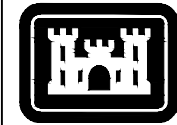
**HDR OBG** a joint venture

ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY  
ISTT AREA CROSS  
SECTION A-A'

Sheet  
Reference  
Number:

C-05





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6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	02/17/19	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/10/15	
3	FINAL RA CONSTRUCTION DRAWINGS	07/16/15	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/15	
1	INTERMEDIATE DESIGN	08/27/15	

Designed by:	IC	Date:	10/22/2019
Drawn by:	SK	Drawing code:	
Checked by:		Plot scale:	
Submitted by:	IC	CADD File Name:	

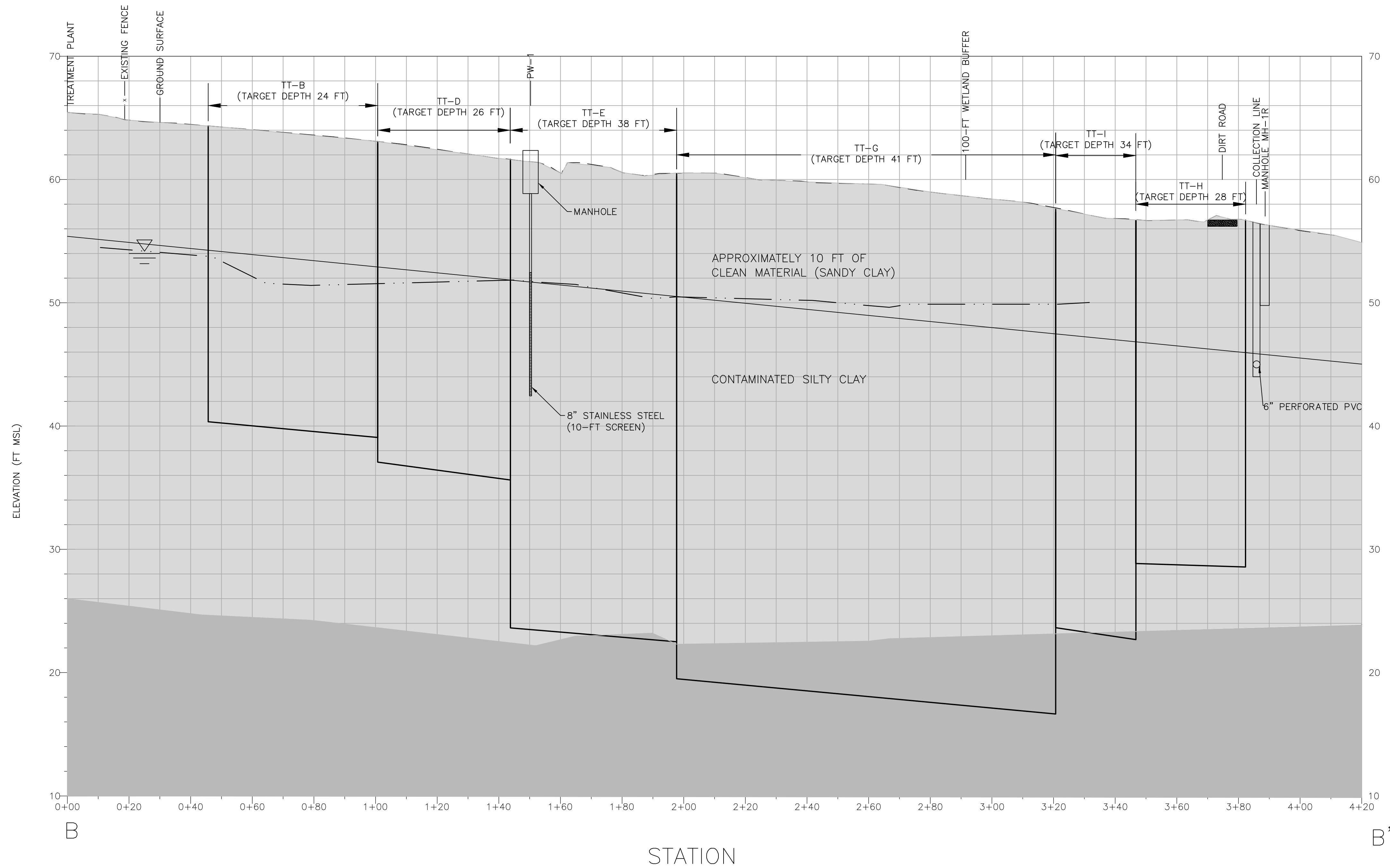
U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

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ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY  
ISTT AREA CROSS  
SECTION B-B'

Sheet  
Reference  
Number:

C-06



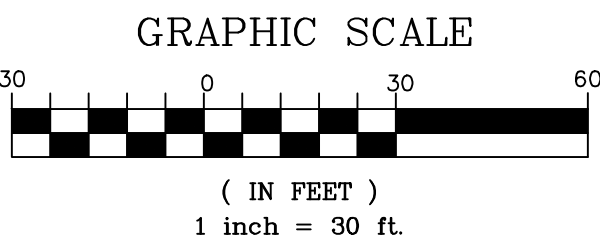
- NOTES:
- GROUNDWATER TABLE SHOWN IS BASED ON BORINGS COMPLETED DURING THE 2014 PDI.
  - PW-1 CONSTRUCTION DETAILS BASED ON DRAWINGS PREPARED BY ACRES INTERNATIONAL CORPORATION, DATED AUGUST 1999 AND PREPARED AS PART OF THE ELLIS PROPERTY GROUNDWATER REMEDIATION DESIGN DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED.



SHARP ROAD

#150  
ONE-STORY  
STEEL  
BUILDING  
F.F. = 66.55

- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY
  - WETLAND LIMIT
  - CONTOUR MAJOR
  - CONTOUR MINOR
  - BUILDING OUTLINE
  - GRAVEL ROAD
  - DIRT ROAD
  - PAVED ROAD
  - MANHOLE
  - WETLAND FLAG
  - WETLAND SOIL BORING
  - 30-FT GRID LINE
  - IN SITU THERMAL TREATMENT AREA



- NOTES:
- FOR GENERAL NOTES REFER TO SHEET G-01.
  - CONTRACTOR SHALL COLLECT SOIL SAMPLES FROM BORINGS GENERALLY LOCATED ON A 30-FT X 30-FT GRID PATTERN ACROSS THE ENTIRE TARGET TREATMENT AREA AND AT 10 ADDITIONAL LOCATIONS TO BE IDENTIFIED BY THE COR.
  - GRIDS SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY AND TO PROVIDE AN ESTIMATE OF SAMPLES. ACTUAL GRID NODES SHALL BE ADJUSTED TO ENSURE REPRESENTATIVE SAMPLES ARE COLLECTED AT THE MIDPOINT BETWEEN HEATER ELEMENTS AND AT LOCATIONS OF PREVIOUS ELEVATED TCE CONCENTRATIONS OR AS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.
  - SAMPLES SHALL BE COLLECTED AT 5-FT VERTICAL INTERVALS STARTING AT FIVE FEET BELOW GRADE TO THE TARGET DEPTH OF TREATMENT. WITHIN EACH 5-FT VERTICAL INTERVAL, THE SAMPLE LOCATION SHALL BE BIASED TO WHERE IMPACTS ARE OBSERVED OR INDICATED BY FIELD PID READINGS. IF NO INDICATIONS OF IMPACTS ARE IDENTIFIED, THE SAMPLE SHALL BE LOCATED RANDOMLY WITHIN THE 5-FT INTERVAL.
  - SAMPLES SHALL BE COLLECTED BY A HOT SAMPLING PROTOCOL TO BE SPECIFIED IN THE UFP-QAPP PREPARED BY THE CONTRACTING OFFICER.



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7	FINAL ISTT RA CONSTRUCTION DRAWINGS	10/26/19	
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/21/19	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/19/19	
3	FINAL RA CONSTRUCTION DRAWINGS	09/27/19	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/19	
1	INTERMEDIATE DESIGN	06/27/19	

Designed by:	IC	Date:	10/22/2019
Drawn by:	SK	Drawing code:	
Checked by:		Plot scale:	
Submitted by:	IC	CADD File Name:	

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KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

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ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

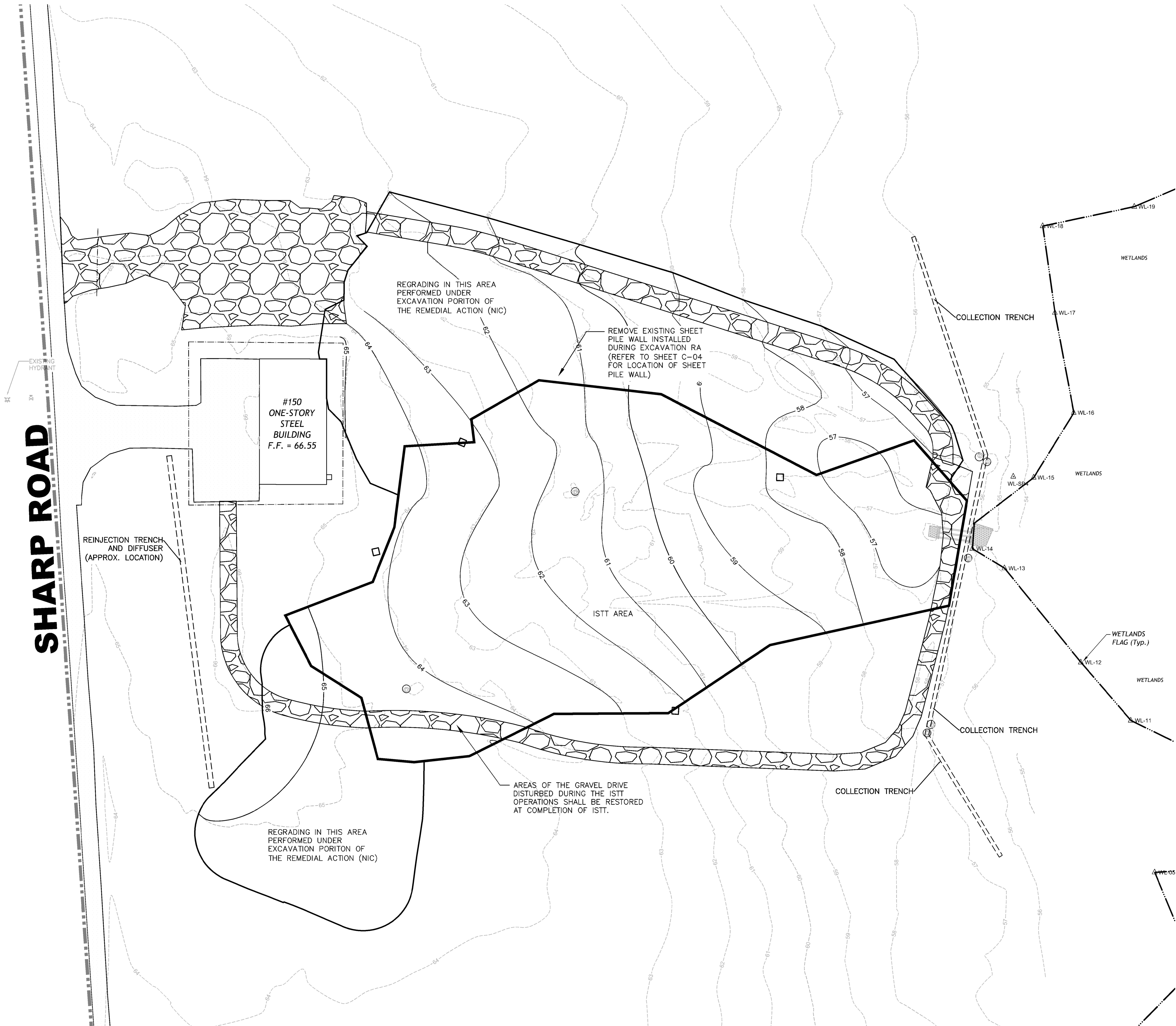
ISTT AREA CONFIRMATORY  
SAMPLING PLAN

Sheet  
Reference  
Number:

C-07

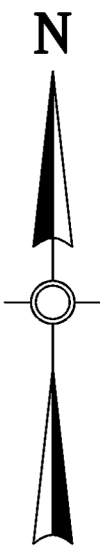
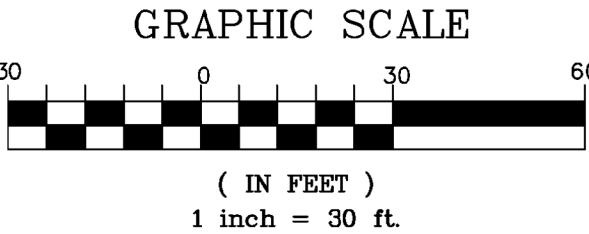


SHARP ROAD



- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY
  - WETLAND LIMIT
  - CONTOUR MAJOR
  - CONTOUR MINOR
  - BUILDING OUTLINE
  - MANHOLE
  - WETLAND FLAG
  - WETLAND SOIL BORING
  - TREE LINE
  - RESTORED GRAVEL DRIVE (PERFORMED UNDER EXCAVATION PORTION OF REMEDY)
  - PROPOSED CONTOUR MAJOR
  - PROPOSED CONTOUR MINOR

- NOTES:**
- FOR GENERAL NOTES REFER TO SHEET G-01.
  - FINAL GRADES SHALL MATCH EXISTING GRADES.
  - THE CONTRACTOR SHALL PROVIDE SUFFICIENT SLOPES TO ALLOW FOR NATURAL DRAINAGE AND PREVENT PONDING OF WATER.
  - ALL PERIMETER EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
  - FINAL COVER OF AREAS SHALL BE AS SHOWN IN SHEET C-09.
  - PROPOSED CONTOURS OUTSIDE OF THE ISTT AREA WILL BE GRADED DURING THE EXCAVATION PORTION OF THE REMEDIAL ACTION (NIC).
  - CONTRACTOR SHALL REMOVE SHEET PILE WALL INSTALLED DURING THE EXCAVATION PORTION OF THE REMEDIAL ACTION.



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Symbol	Description	Date	Appr.
8	FINAL ISTT RA CONSTRUCTION DRAWINGS	2/2020	
7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/09/19	
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	02/11/19	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/19/18	
3	FINAL RA CONSTRUCTION DRAWINGS	08/27/18	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/18	
	INTERMEDIATE DESIGN	02/27/18	

Designed by: TC

Drawn by: SK

Checked by:

Submitted by: TC

Date: 10/22/2019

Drawing code:

Plot scale:

CADD File Name:

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

**HDR OBG** a joint venture

ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

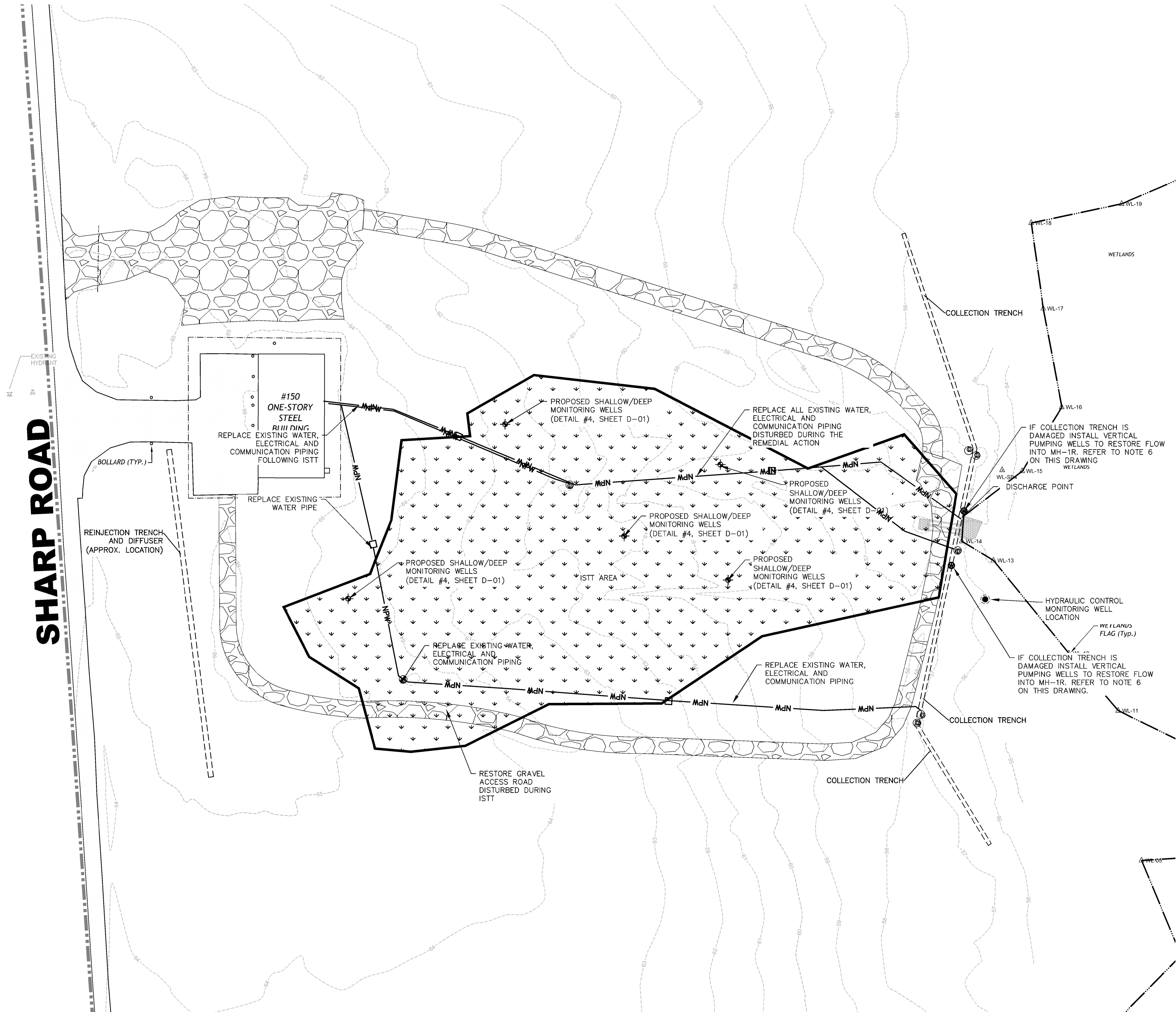
**SITE RESTORATION  
GRADING PLAN**

Sheet Reference Number:

**C-08**



SHARP ROAD



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- WETLAND LIMIT
- CONTOUR MAJOR
- CONTOUR MINOR
- BUILDING OUTLINE
- PAVED ROAD
- MANHOLE
- WETLAND FLAG
- WETLAND SOIL BORING
- RESTORED GRAVEL DRIVE (PERFORMED UNDER EXCAVATION PORTION OF REMEDY)
- HYDRO SEED AND MULCH
- PROPOSED CLUSTER MONITORING WELL
- PROPOSED HYDRAULIC CONTROL MONITORING WELL LOCATION
- PROPOSED PUMPING WELL

NOTES:

- PERIMETER EROSION CONTROL MEASURES WILL NOT BE REMOVED UNTIL ALL AREAS HAVE BEEN STABILIZED AND REMOVAL OF PERIMETER EROSION CONTROL MEASURES HAS BEEN APPROVED BY THE CONTRACTING OFFICER.
- AREA REQUIRING HYDRO-SEED AND MULCH WILL DEPEND ON THE CONTRACTOR'S OPERATIONS. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE HYDRO-SEEDED AND MULCHED.
- PROPOSED MONITORING WELLS SHALL BE INSTALLED 6 MONTHS FOLLOWING ISTT OPERATIONS SHUT DOWN OR WHEN SOIL/GROUNDWATER TEMPERATURES WITHIN THE TREATMENT ZONE ARE BELOW 120 DEGREES F (50 DEG C), WHICHEVER IS SOONER.
- PROPOSED SHALLOW MONITORING WELLS SHALL BE INSTALLED TO A DEPTH OF 25 FEET BELOW GROUND SURFACE (FT BGS), AND PROPOSED DEEP MONITORING WELLS SHALL BE INSTALLED TO A DEPTH OF 35 FT BGS.
- AS PART OF SITE RESTORATION THE CONTRACTOR SHALL REPAIR, RESTORE AND REPLACE ALL EXISTING INFRASTRUCTURE IMPACTED BY ISTT OPERATIONS. THIS INCLUDES BUT IS NOT LIMITED TO ALL PIPING, COMMUNICATIONS AND ELECTRIC ASSOCIATED WITH PW-1, PW-2, COLLECTION TRENCH, MH-1R, MH-2, THE TREATMENT PLANT AND EXISTING CULVERTS.
- IF IT IS DETERMINED THROUGH LOSS OF FLOW THAT THE COLLECTION TRENCH HAS BEEN DAMAGED DURING ISTT OPERATIONS THE CONTRACTOR SHALL INSTALL TWO NEW PUMPING WELLS AT THE LOCATIONS SHOWN ON THIS DRAWING. REFER TO SHEET D-01 FOR DETAILS OF THE PUMPING WELLS AND SPECIFICATION SECTION 33 11 13 - PUMPING WELLS. PUMPING WELLS SHALL DISCHARGE TO MH-1R AND COMMUNICATIONS SHALL BE PROVIDED TO PREVENT OVERFLOWING OF MH-1R.
- PIPING PULL BOXES SHALL BE PROVIDED AT A MINIMUM OF ONE BOX FOR EVERY 200-FT OF PIPE AND ANY CHANGE IN DIRECTION GREATER THAN 45 DEGREES BETWEEN THE TRENCH AND GROUNDWATER TREATMENT BUILDING.

GRAPHIC SCALE



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2/2020	12/09/19	10/22/19	02/11/19	09/19/18	07/16/18	02/27/18	Date	Appr.
FINAL ISTT RA CONSTRUCTION DRAWINGS	FINAL ISTT RA CONSTRUCTION DRAWINGS	DRAFT ISTT RA CONSTRUCTION DRAWINGS	REVISED FINAL RA CONSTRUCTION DRAWINGS	REVISED FINAL RA CONSTRUCTION DRAWINGS	DRAFT FINAL RA CONSTRUCTION DRAWINGS	INTERMEDIATE DESIGN		

Designed by:	TC	Date:	10/22/2019
Drawn by:	SK	Drawing code:	
Checked by:		Plot scale:	
Submitted by:	TC	CADD File Name:	

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KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

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SITE RESTORATION RE-VEGETATION PLAN

Sheet Reference Number:	C-09
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4	REVISED FINAL RA CONSTRUCTION DRAWINGS	08/10/19	
3	FINAL RA CONSTRUCTION DRAWINGS	08/27/19	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/19	
1	INTERMEDIATE DESIGN	06/27/19	

Designed by:	TC	Date:	10/22/2019
Drawn by:	SK	Drawing code:	
Checked by:		Plot scale:	
Submitted by:	TC	CADD File Name:	

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KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

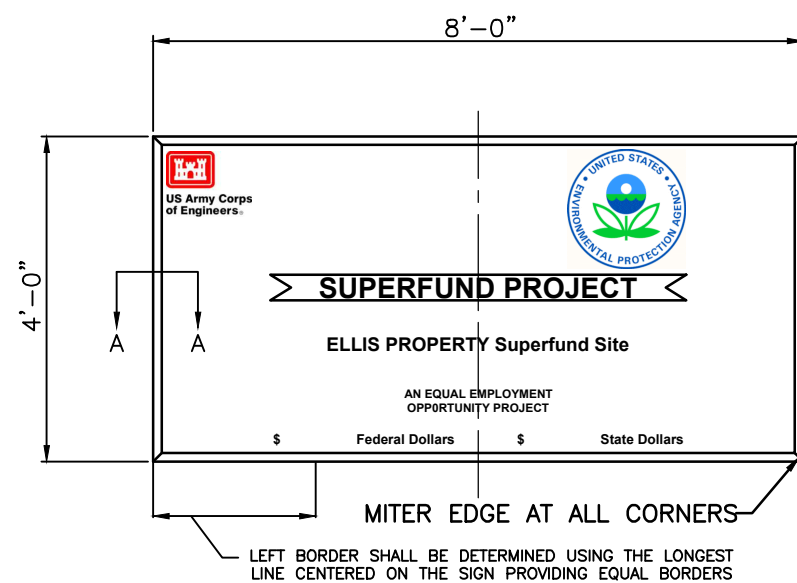
HDR OBG a joint venture

CONSTRUCTION DETAILS

ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

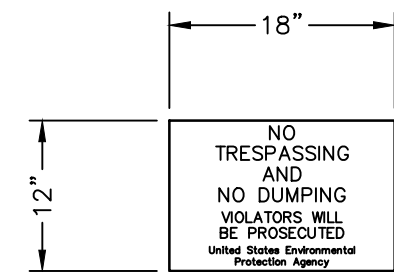
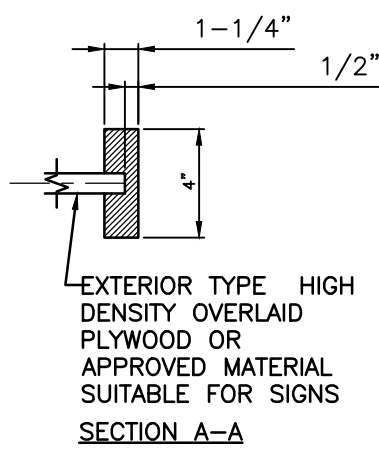
Sheet  
Reference  
Number:

D-01

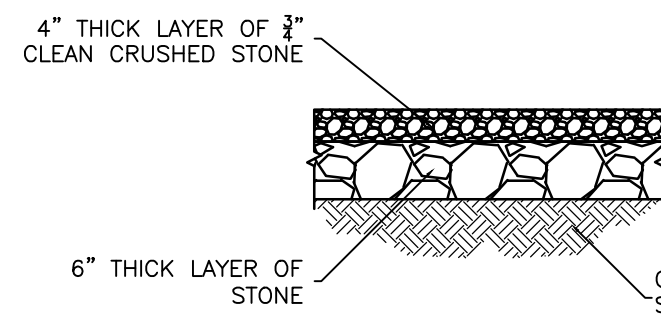


1. PROVIDED BY OTHERS. NOT PART OF THIS CONTRACT.

PROJECT SIGN  
SCALE: N.T.S.



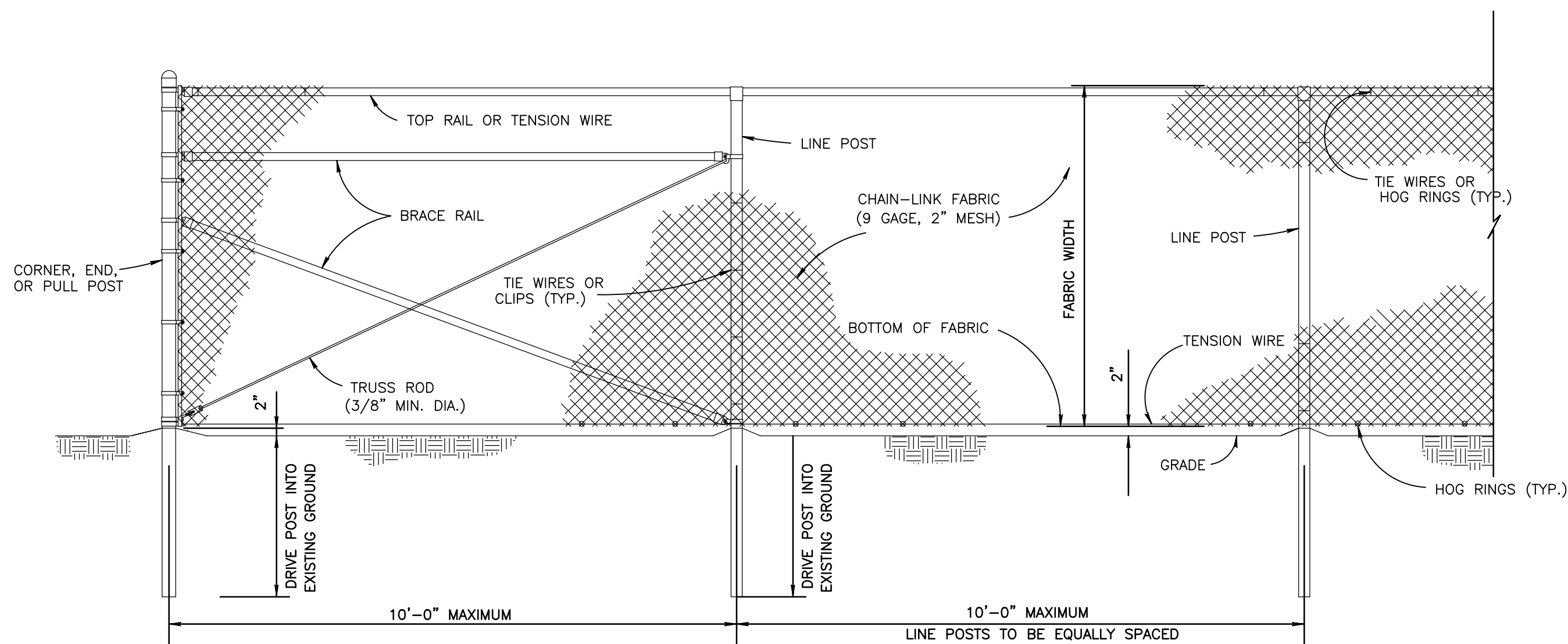
"NO TRESPASSING" SIGN  
SCALE: N.T.S.



#### NOTES

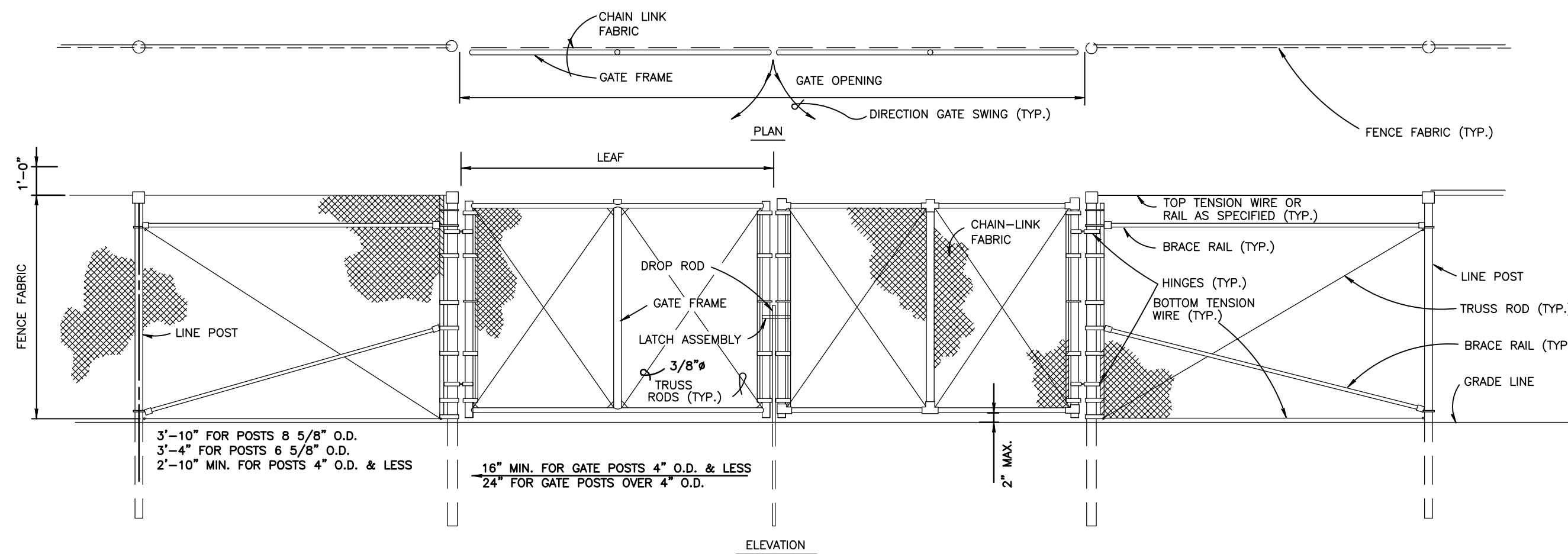
1. PROVIDE CROWN ALONG ROAD TO PROMOTE DRAINAGE.
2. PROVIDE A MAXIMUM SLOPE OF 10%.
3. CLEAR AND STRIP ROADBED AND PARKING AREAS OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
4. ACCESS ROAD TO BE INSTALLED BY OTHERS. ANY DAMAGE TO ROAD AS A RESULT OF ISTT OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR UPON COMPLETION OF ISTT.

RESTORED ACCESS ROAD SECTION DETAIL  
SCALE: NOT TO SCALE

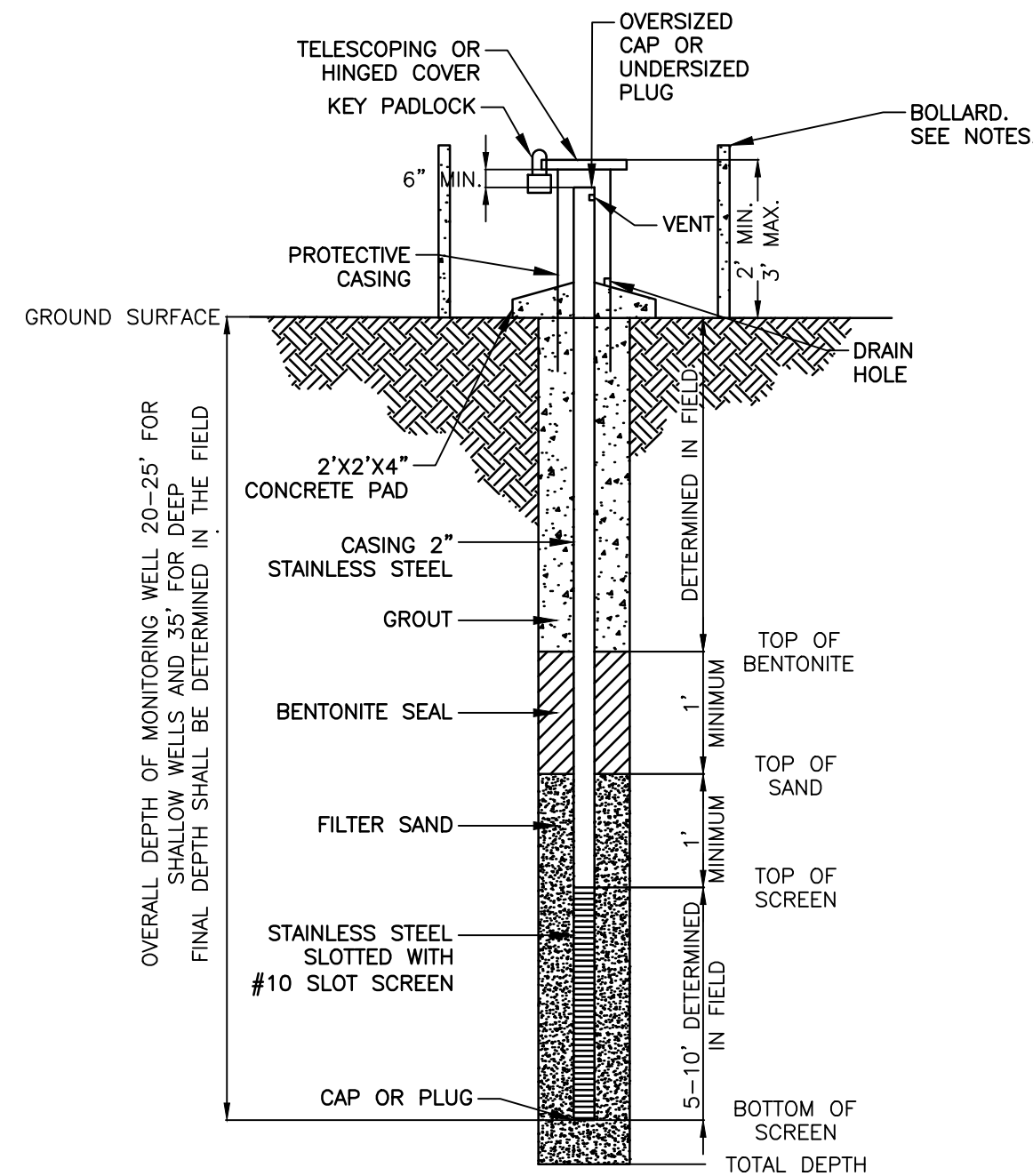


- NOTE:
1. FENCE SHALL BE INSTALLED TO WITHSTAND A SIDE PRESSURE OF 250 PSI.
  2. IF POST CANNOT BE DRIVEN CONCRETE BASES MAY BE NEEDED.

CHAIN LINK SECURITY FENCE DETAIL  
SCALE: N.T.S.



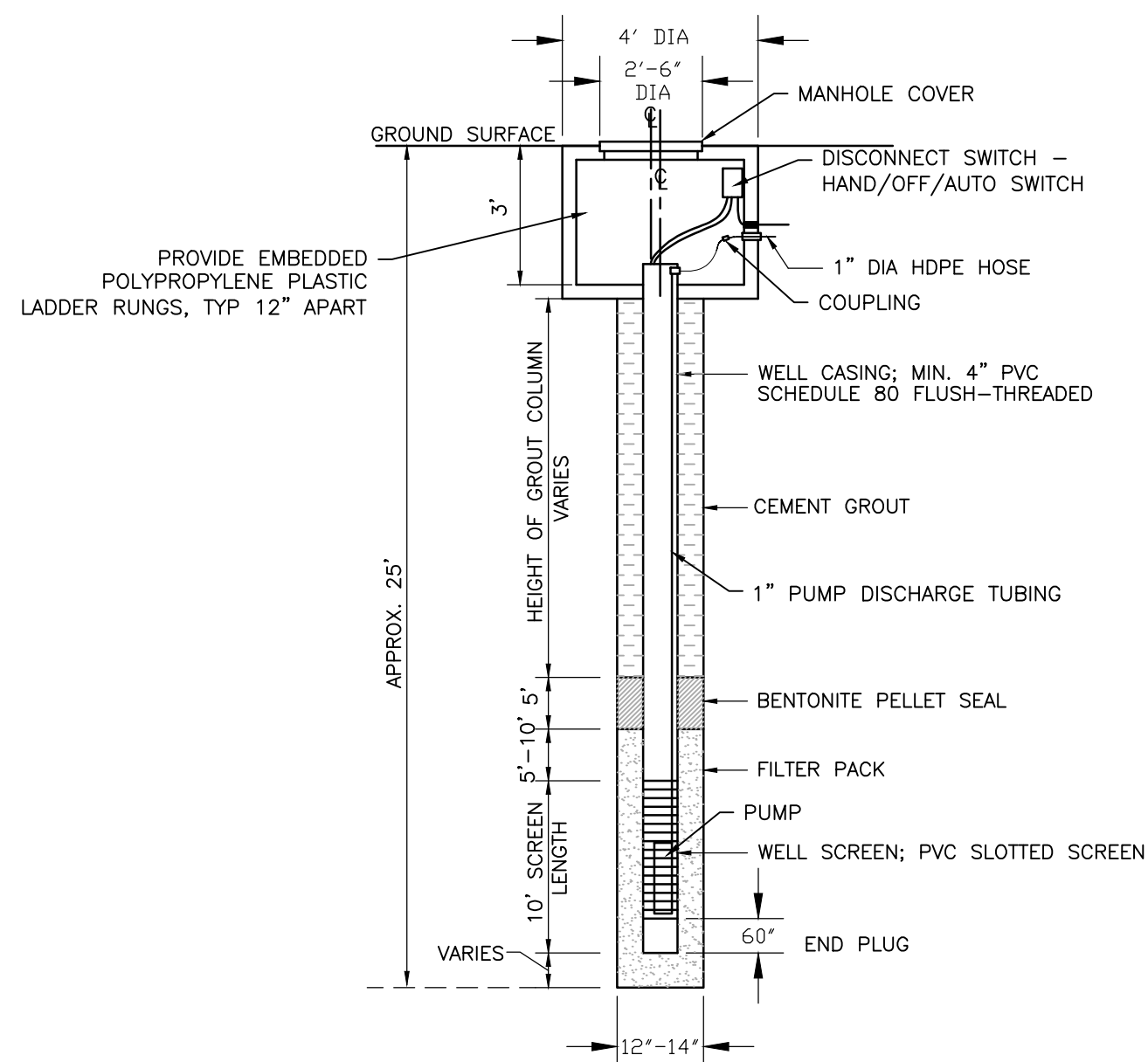
DOUBLE SWING GATE (TYPE FE7 FENCE)  
SCALE: N.T.S.



#### NOTES

1. SIX 2-INCH DIAMETER OR LARGER CONCRETE-FILLED STEEL POSTS TO SERVE AS BOLLARDS WILL BE EQUALLY SPACED AROUND EACH SHALLOW/DEEP WELL PAIR. THE BOLLARDS WILL BE CEMENTED IN PLACE 2 TO 3 FEET BELOW GROUND, OUTSIDE THE CONCRETE PAD. THE POSTS EXTEND A MINIMUM OF 3 FEET ABOVE GROUND. AFTER INSTALLATION, THE BOLLARDS WILL BE PAINTED YELLOW. THE GROUND IMMEDIATELY SURROUNDING THE TOP OF THE WELL PAD WILL BE SLOPED AWAY FROM THE WELL.

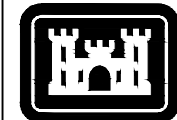
MONITORING WELL DETAIL  
SCALE: N.T.S.



#### NOTES

1. DETAIL IS PROVIDED FOR CONTRACTOR'S REFERENCE. PER SPECIFICATION SECTION 33.11.13 - PUMPING WELLS, THE CONTRACTOR SHALL PREPARE A PLAN FOR INSTALLING WELL POINTS TO REPLACE SECTIONS OF THE COLLECTION TRENCH THAT ARE IMPACTED BY ISTT OPERATION. THE PLAN SHALL PROVIDE FOR THE COMPLETE INSTALLATION OF VERTICAL WELL POINTS INCLUDING ALL EQUIPMENT, INSTRUMENTATION, CONTROLS, ELECTRICAL PIPING, AND HOUSING TO INSTALL TWO WORKING PUMPING WELLS. DISCHARGE PIPING SHALL BE INSTALLED TO CONVEY EXTRACTED WATER TO MH-1.





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2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/19	
1	INTERMEDIATE DESIGN	06/27/19	

Designed by:	IC	Date:	10/22/2019
Drawn by:	SK	Drawing code:	
Checked by:		Plot scale:	
Submitted by:	IC	CADD File Name:	

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

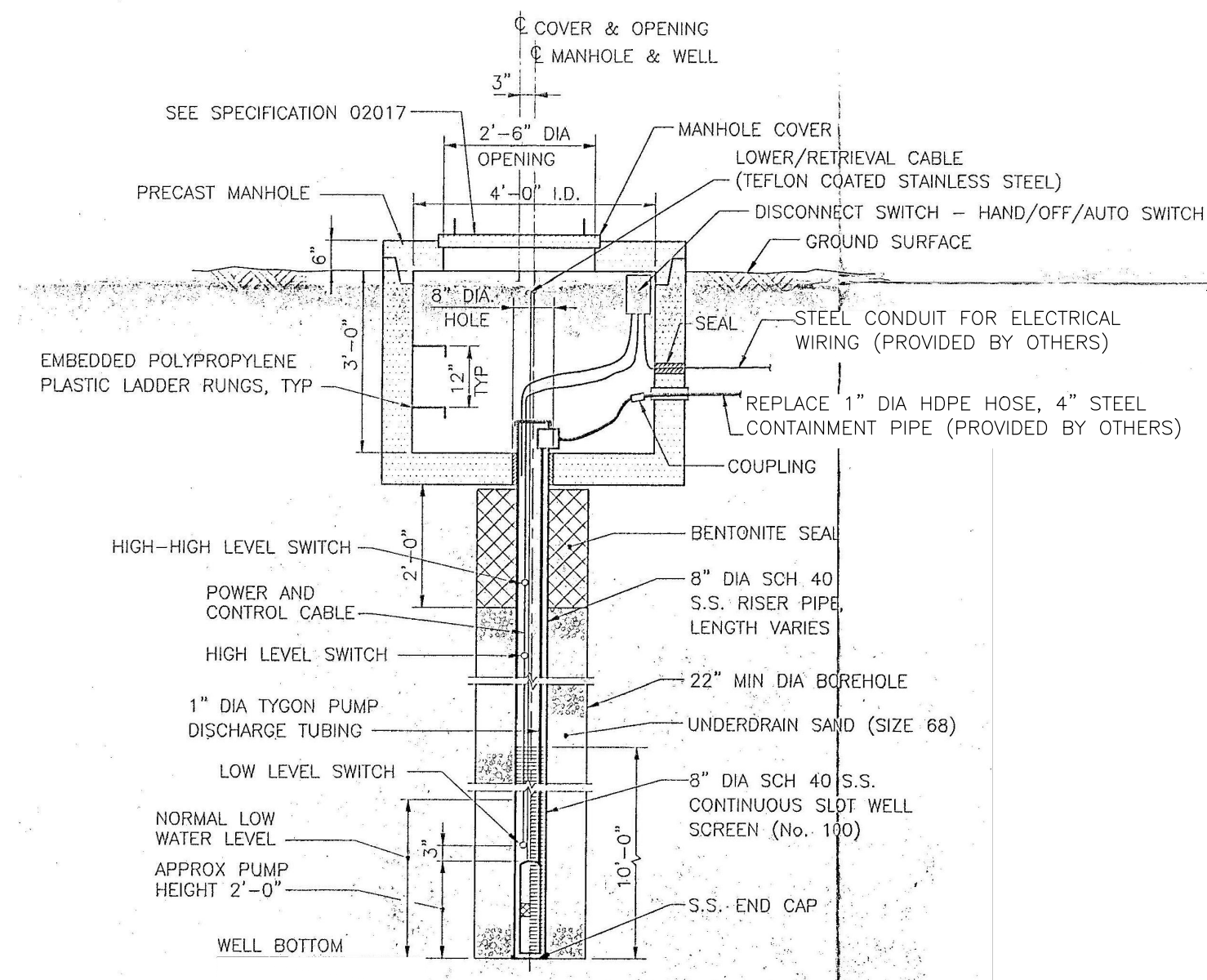
HDR OBG a joint venture

ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

AS-BUILT DETAILS

Sheet  
Reference  
Number:

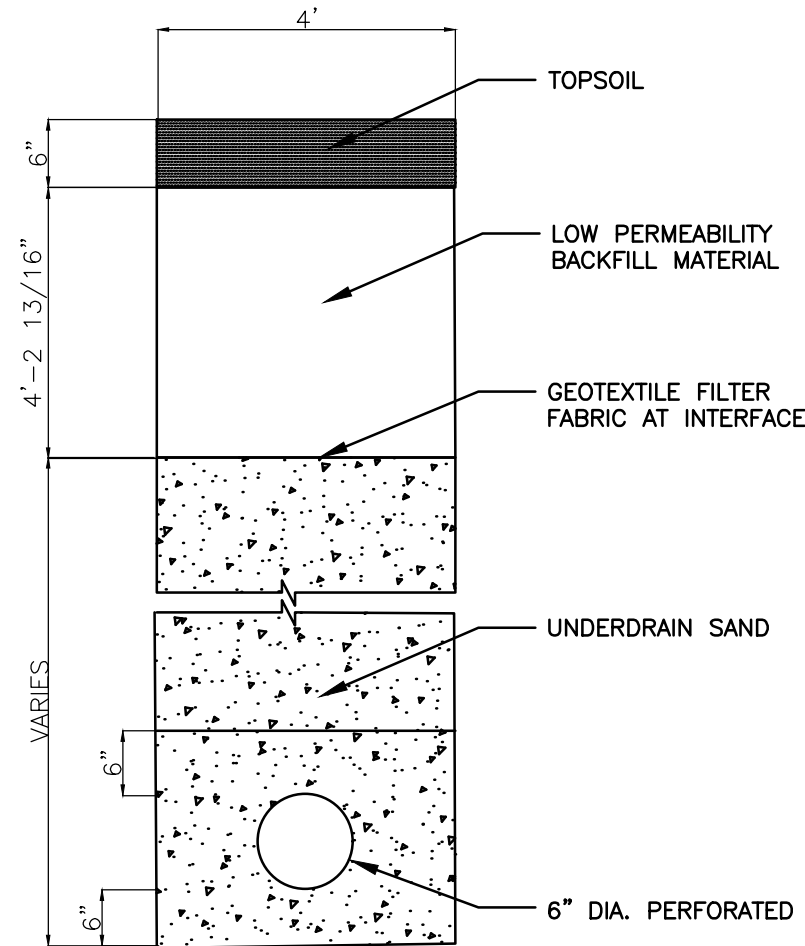
D-02



1. CONTRACTOR TO REMOVE ALL EXISTING EQUIPMENT FROM INSIDE PUMPING WELL THAT COULD BE DAMAGED BY HIGH TEMPERATURES EXPECTED DURING THE ISTT AND STORE FOR LATER REINSTALLATION.
2. CONTRACTOR TO PROVIDE A PRESSURE- AND TEMPERATURE-RATED CAP FOR PW-1 AND PW-2 TO PREVENT HOT VAPORS FROM EMERGING DURING ISTT.
3. ANY DAMAGE RESULTING FROM ISTT SHALL BE REPAIRED BY THE CONTRACTOR.
4. FOLLOWING ISTT, ONCE SOILS HAVE COOLED SUFFICIENTLY CONTRACTOR SHALL RE-INSTALL EQUIPMENT, DISCHARGE PIPING, AND ELECTRICAL WIRING. DISCHARGE PIPING AND ELECTRICAL WIRING TO BE PROVIDED BY OTHERS FOR INSTALLATION.

AS-BUILT DETAIL PW-1 AND PW-2  
SCALE: N.T.S.

1  
D-02

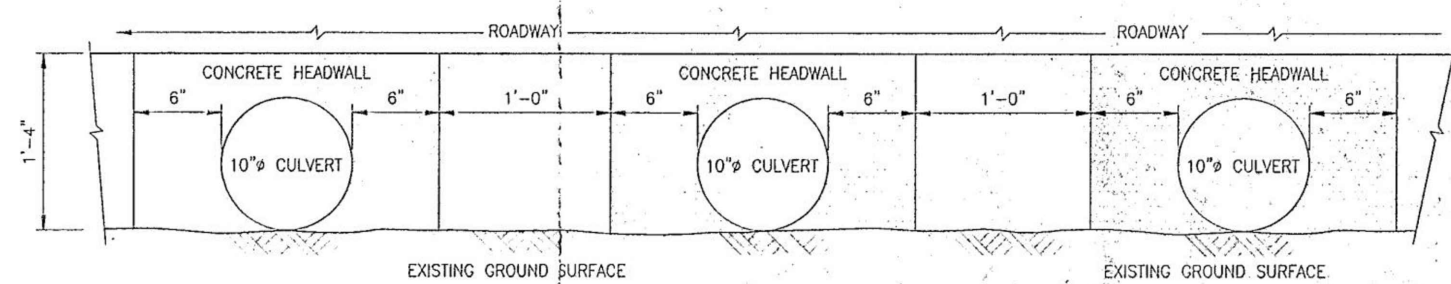


ANY DAMAGE CAUSED BY ISTT SHALL BE REPAIRED BY THE CONTRACTOR.

EXISTING COLLECTION TRENCH DETAIL

SCALE: N.T.S.

2  
D-02

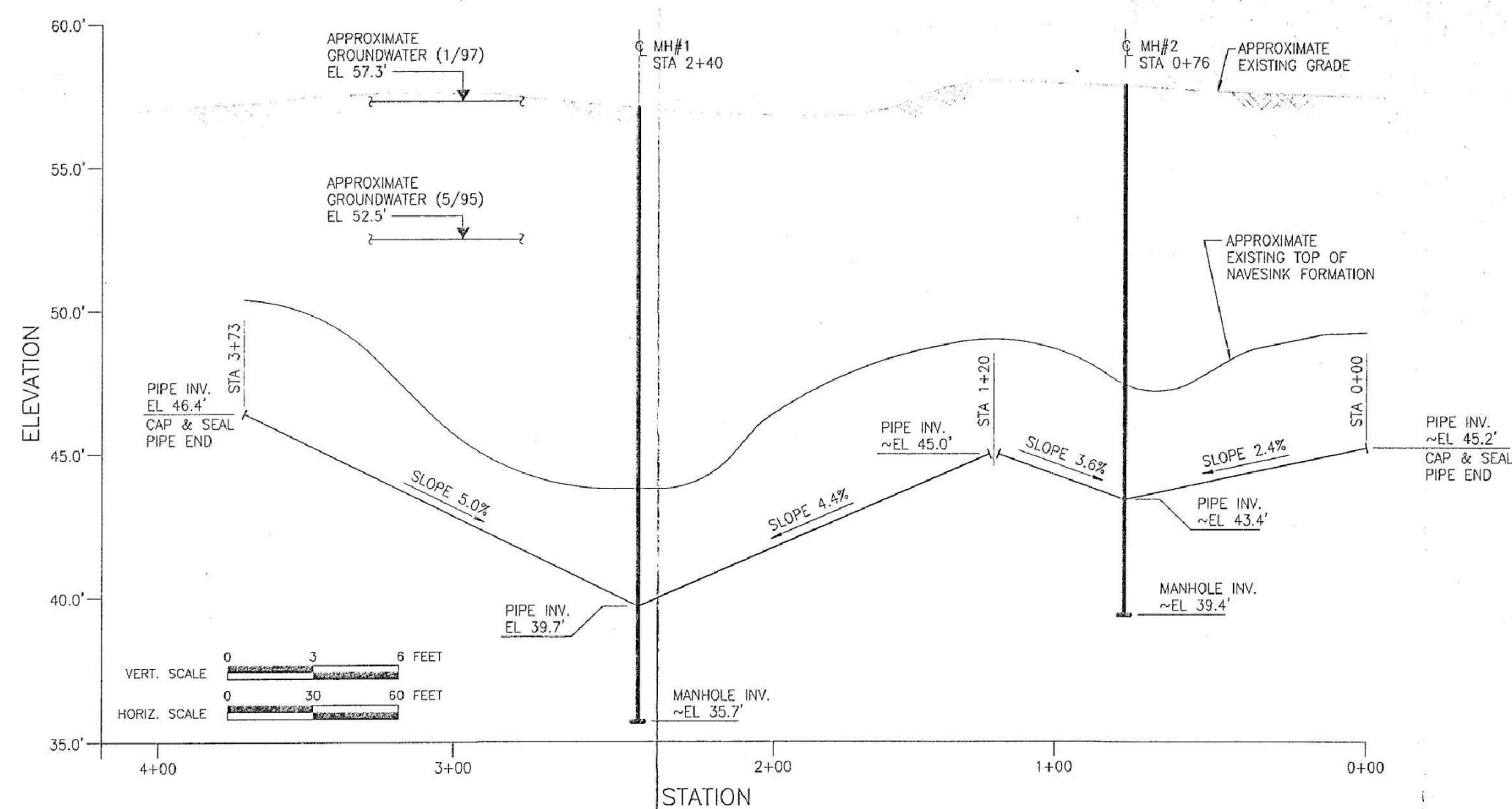


CONTRACTOR SHALL REPAIR AND/OR REPLACE CULVERT TO ITS EXISTING CONDITION FOLLOWING COMPLETION OF ISTT.

EXISTING CULVERT DETAILS

SCALE: N.T.S.

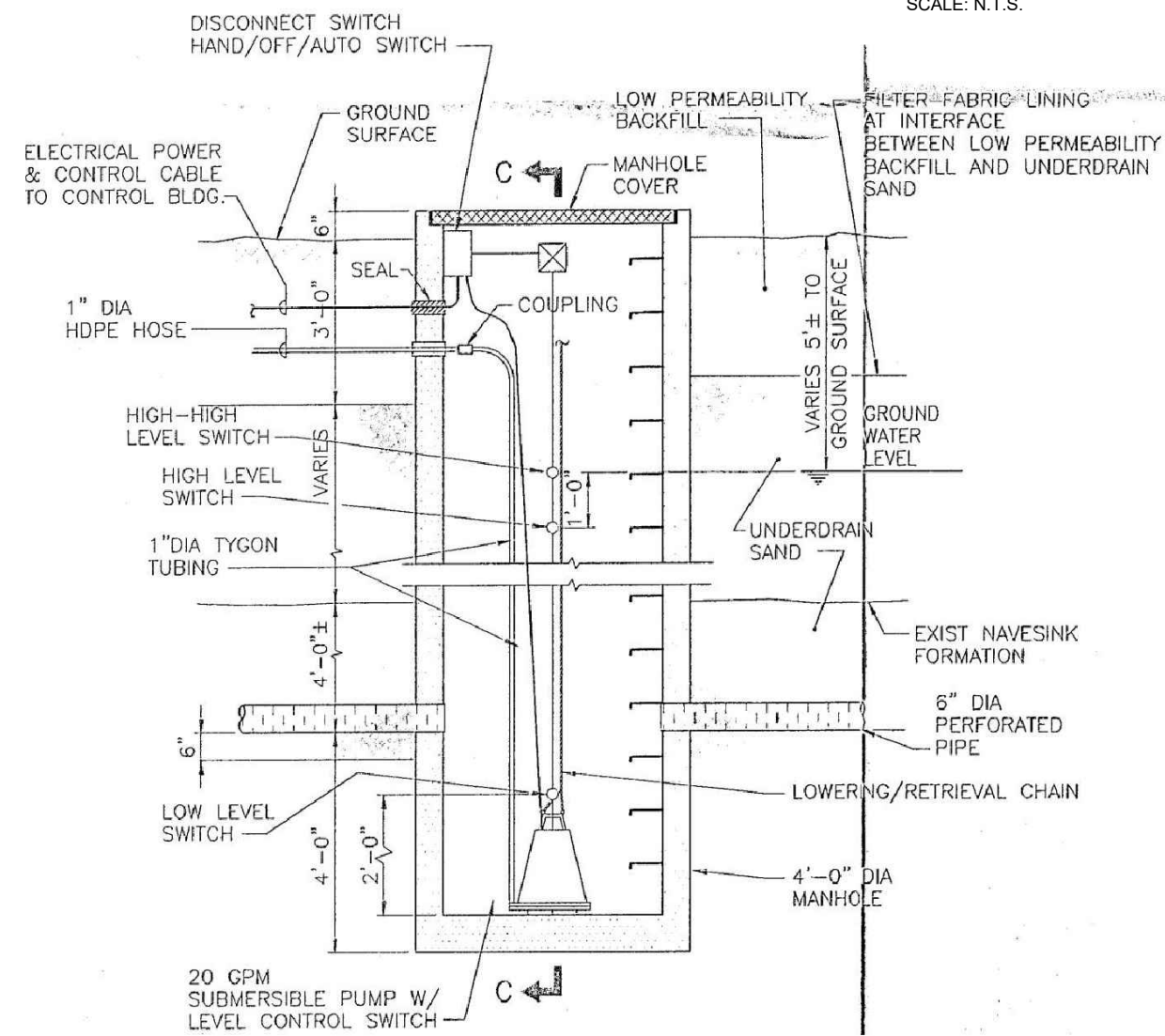
4  
D-02



SECTION DETAIL FOR EXISTING COLLECTION TRENCH

SCALE: N.T.S.

3  
D-02



ANY DAMAGE TO EXISTING MANHOLES OR COLLECTION TRENCH PIPING AS A RESULT OF ISTT SHALL BE REPAIRED/REPLACED BY THE CONTRACTOR.

EXISTING COLLECTION MANHOLE AND PUMP DETAIL

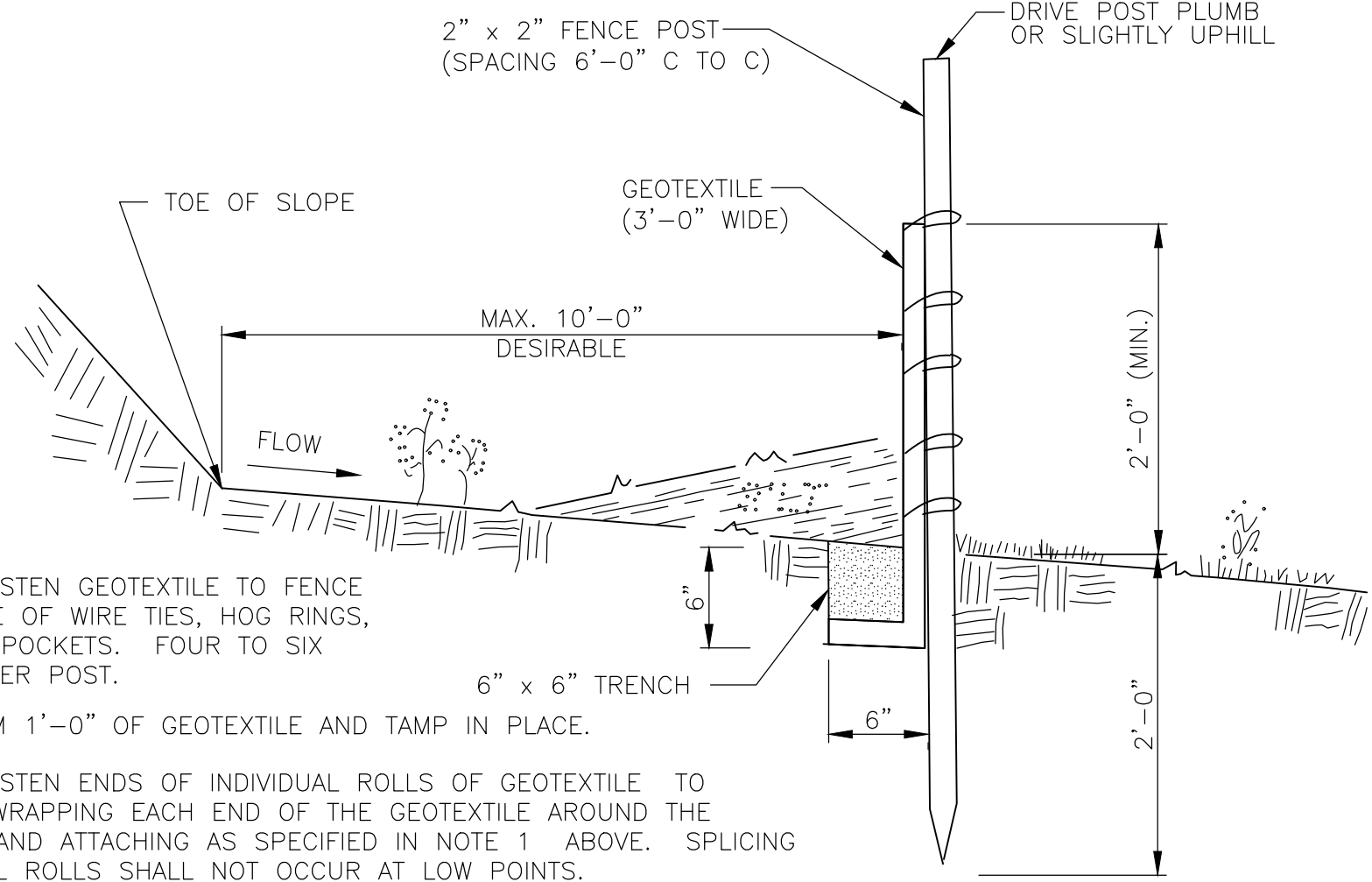
SCALE: N.T.S.

5  
D-02

NOTE:

AS-BUILT DETAILS WERE TAKEN FROM PLAN PREPARED BY ACRES ENTITLED ELIUS PROPERTY GROUNDWATER REMEDIATION DESIGN DRAWINGS AND DATED AUGUST 1999. INFORMATION IS THE BEST AVAILABLE INFORMATION BUT MAY NOT ACCURATELY REPRESENT THE ACTUAL INSTALLED CONDITIONS OF THE INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING INSTALLATION OF INFRASTRUCTURE AND REPAIRING AND/OR REPLACING INFRASTRUCTURE DAMAGED DURING ISTT TO ITS ORIGINAL CONDITION OR BETTER.



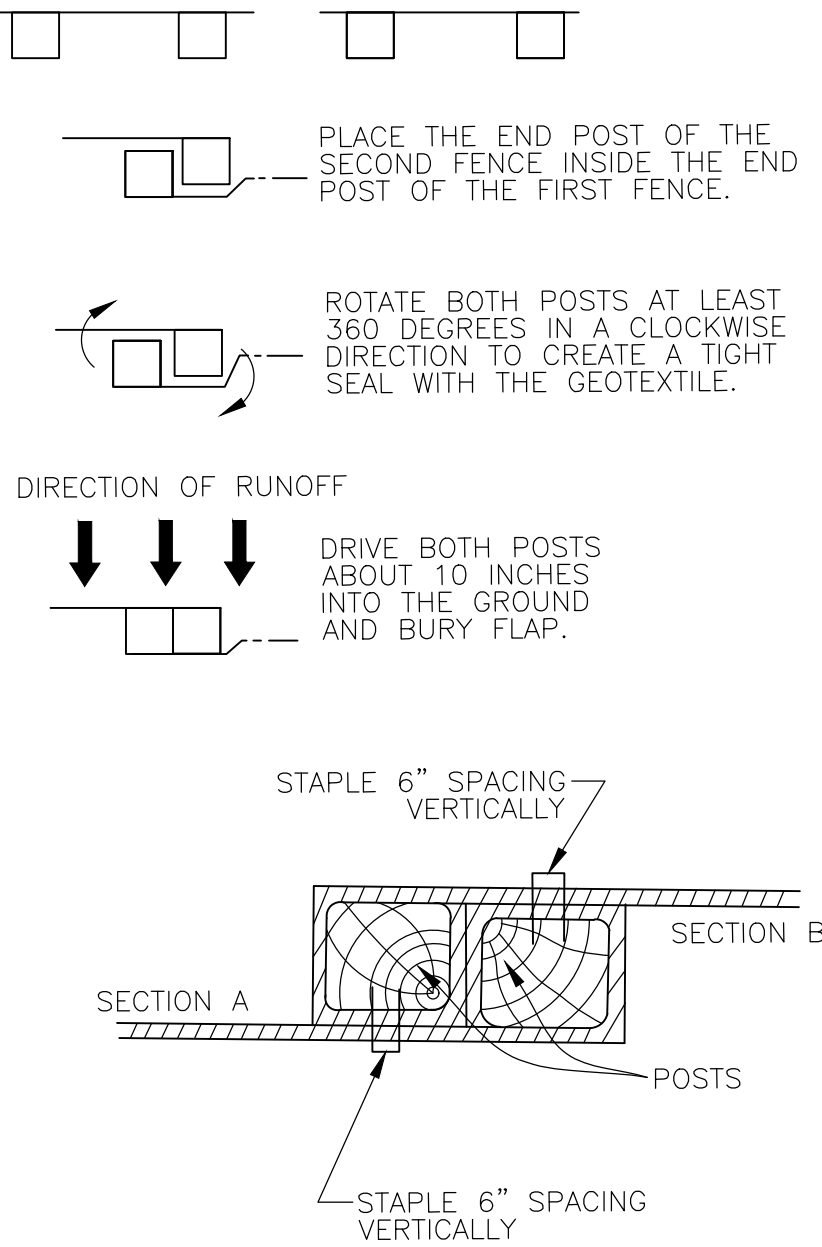


NOTES:

1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.
2. BURY BOTTOM 1'-0" OF GEOTEXTILE AND TAMP IN PLACE.
3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1. ABOVE. SPlicing OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIREABLE.

SILT FENCE  
SCALE: N.T.S.

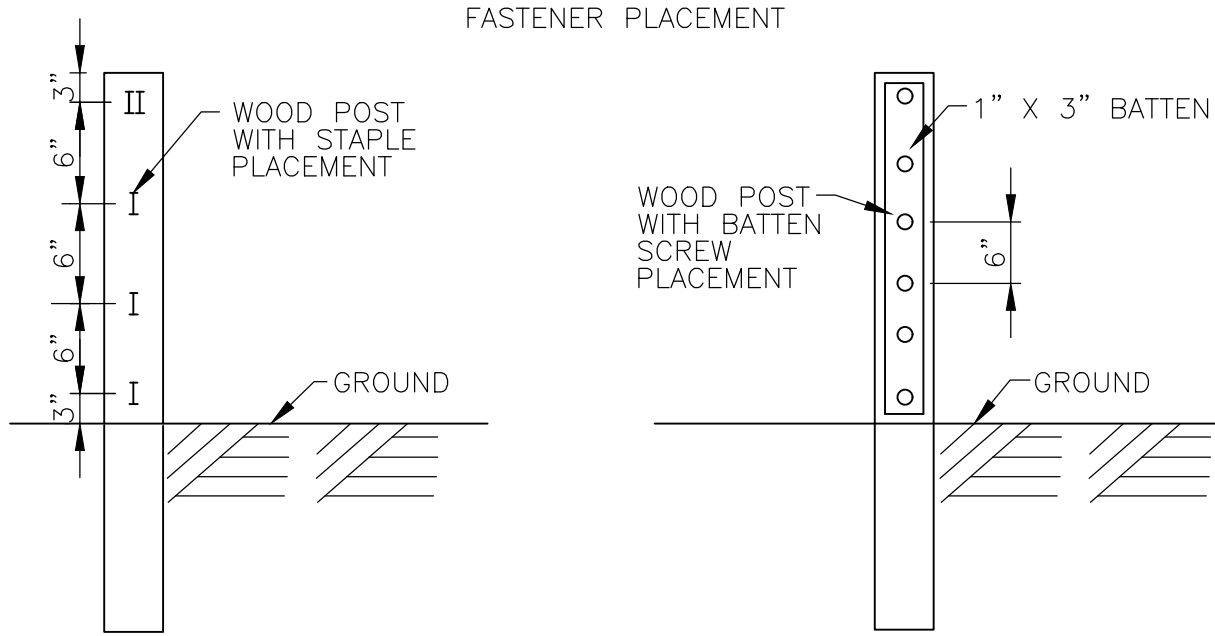
1  
D-03



ATTACHING TWO SILT FENCES  
SCALE: N.T.S.

2  
D-03

FASTENERS FOR WOOD POSTS				
WIRE STAPLES	GAUGE	CROWN	LEGS	STAPLES/POST
	17 MIN.	3/4" WIDE	1/2" LONG	5 MIN.
SCREWS	LENGTH	PHILLIPS HEADS	SCREW/POST	
	2 "	2"	6 MIN.	



SILT FENCE FASTENER REQUIREMENTS  
SCALE: N.T.S.

3  
D-03

SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THE PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
3. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
4. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE STANDARDS. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE STANDARDS.
5. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH IN ACCORDANCE WITH THE STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.
6. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
7. ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
8. SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHOULD BE PROTECTED BY A HAY BALE BARRIER OR SEDIMENT FENCE. PROPOSED LOCATIONS MUST BE DELINEATED ON THE PLANS.
9. A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE RIP RAP PAD MUST BE 100 FEET IN LENGTH AND THE STONE MUST BE 1.5" - 4" IN SIZE, PLACED 12" THICK AND THE FULL WIDTH OF THE ENTRANCE. IT SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC FILTER FABRIC AND MAINTAINED. THE STRUCTURE MUST BE DELINEATED AND DETAILED ON THE PLANS.
10. IF A STONE CONSTRUCTION ACCESS IS TO BE USED AS AN EXIT ONTO A MAJOR HIGHWAY, A THIRTY (30) FOOT PAVED TRANSITION AREA SHALL BE INSTALLED.
11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2 1/2" CRUSHED STONE OR SUB BASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
13. ALL CATCH BASIN INLETS WILL BE PROTECTED DURING CONSTRUCTION (FILTER DETAILS APPEAR ON PLAN).
14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTRATION DEVICE. THE SEDIMENT FILTER MUST BE PLACED SO AS NOT TO CAUSE EROSION OF THE DOWNSTREAM AREA. FIELD PLACEMENT AND USE OF THE STRUCTURE MUST BE APPROVED BY THE DISTRICT EROSION CONTROL INSPECTOR PRIOR TO COMMENCEMENT OF DEWATERING ACTIVITIES.
16. THE BURLINGTON COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY LAND DISTURBANCE.
17. SOIL HAVING A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE MUST BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE BEFORE SEEDBED PREPARATION.
18. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION RATES AT THE REQUEST OF THE BURLINGTON COUNTY SOIL CONSERVATION DISTRICT.
19. NJSA 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE AS A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
20. NJSA 4:24-39, ET SEQ. REQUIRES THAT UPON PERMANENT SITE STABILIZATION AND COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL APPLY TO THE SOIL CONSERVATION DISTRICT FOR A FINAL COMPLIANCE INSPECTION TO CHECK THAT ALL THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES.
21. OFF-SITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE DISTRICT EROSION CONTROL INSPECTOR.
22. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
23. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ALL SUBSEQUENT OWNERS.
24. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING TOPSOIL, THE STOCKPILE SHALL BE SEEDDED WITH TEMPORARY VEGETATION. STABILIZE TOPSOIL STOCKPILES WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE ESTABLISHMENT OF TEMPORARY SEED.
25. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE BURLINGTON COUNTY SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1.
27. THE DISTRICT EROSION CONTROL INSPECTOR MAY REQUIRE ADDITIONAL MEASURES TO BE INSTALLED.
28. IMMEDIATELY PRIOR TO TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING. SEE DETAILS.
29. NJSA 4:24-39 ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE COMPLETION OF A SOIL COMPACTION MITIGATION VERIFICATION FORM AND CONFIRMATION BY THE DISTRICT INSPECTOR THAT THE COMPACTION MITIGATION REQUIREMENTS IN THE STANDARD FOR LAND GRADING HAVE BEEN SUFFICIENTLY ADDRESSED.
30. THE RESPONSIBILITY FOR EROSION CONTROLS FOR INDIVIDUAL LOTS WILL TRANSFER TO SUBSEQUENT OWNERS OF THE LOT. THIS RESPONSIBILITY WILL BE DESCRIBED IN THE DEED, AND A SINGLE FAMILY HOME PLAN CONTAINING ALL NECESSARY EROSION CONTROLS WILL BE PROVIDED TO THE OWNER.
31. CONCRETE TRUCK WASHOUT AREAS WILL BE MAINTAINED ON A CONTINUAL BASIS AND AS NEEDED.
32. THE STORMWATER POLLUTION PREVENTION PLAN AND THE SPILL RESPONSE PLAN SHALL BE AVAILABLE ON SITE FOR REVIEW BY THE SCD INSPECTOR AND/OR THE NJDEP INSPECTOR.
33. THE SCD INSPECTOR OR NJDEP INSPECTOR MAY REQUIRE ADDITIONAL MEASURES FOR STORMWATER POLLUTION PREVENTION TO BE INSTALLED.
34. INSPECTIONS OF ALL STORMWATER POLLUTION PREVENTION PLAN MEASURES WILL BE CONDUCTED AND DOCUMENTED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
35. WASTE COLLECTION CONTAINERS WILL NOT BE PERMITTED TO OVERFLOW.
36. ANY SPILLS OF HAZARDOUS OR SANITARY WASTES WILL BE CLEANED UP IMMEDIATELY, AND IN ACCORDANCE WITH THE SPILL RESPONSE PLAN. SPILL KITS MUST BE AVAILABLE ONSITE OR ADJACENT TO THE SITE.
37. ANY HAZARDOUS SUBSTANCE RELEASES IN EXCESS OF REPORTABLE QUANTITIES (RQ) ESTABLISHED UNDER 40 C.F.R. 110, 117 AND 302 THAT OCCUR WITHIN A 24-HOUR PERIOD MUST BE REPORTED THE NATIONAL RESPONSE CENTER (800 424-8802).

SOIL EROSION AND SEDIMENT CONTROL PERMIT REQUIREMENTS:

1. THE CONTRACTOR WILL RETAIN AN INDEPENDENT CONTRACTOR FOR COMPLETING THE SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL PROCESS PRIOR TO PROJECT START, WHICH CONSISTS OF SUBMITTAL OF SOIL EROSION AND SEDIMENT CONTROL PLAN APPLICATIONS ALONG WITH REQUIRED SIGNED AND SEALED PLANS AND DETAILS TO THE BURLINGTON COUNTY SOIL CONSERVATION DISTRICT.



US Army Corps  
of Engineers®  
Kansas City District

ORIGINAL SIGNED AND SEALED BY

SIGNATURE

Symbol	Description	Date	Apr.
7	FINAL ISTT RA CONSTRUCTION DRAWINGS	12/29/19	
6	DRAFT ISTT RA CONSTRUCTION DRAWINGS	10/22/19	
5	REVISED FINAL RA CONSTRUCTION DRAWINGS	02/17/19	
4	REVISED FINAL RA CONSTRUCTION DRAWINGS	09/10/15	
3	FINAL RA CONSTRUCTION DRAWINGS	08/07/15	
2	DRAFT FINAL RA CONSTRUCTION DRAWINGS	07/16/15	
1	INTERMEDIATE DESIGN	08/27/16	

Designed by: IC	Date: 10/22/2019
Drawn by: SK	Drawing code:
Checked by:	Plot scale:
Submitted by: IC	CADD File Name:

U.S. ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT  
KANSAS CITY, MISSOURI

HDR OBG a joint venture

ELLIS PROPERTY SUPERFUND SITE  
EVESHAM TOWNSHIP, NEW JERSEY

EROSION CONTROL  
DETAILS

Sheet  
Reference  
Number:

D-03